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C:\> turn to page 59

RESCUE YOUR PC
Do this now — prevent
disaster later p38

**IS YOUR
ROUTER
BEING
HACKED?**

Find out and
stop it **p60**

Computer **active**

ISSUE 454 | 22 JULY – 4 AUG 2015

Are you young enough for a free PC? p8

Your friendly guide to technology

Windows 10 **Should You Upgrade?**

Your
No-Hype,
No-Jargon
Guide



Yes, it's **free** – but is
it right for YOU? **p50**

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SCAN

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From the Editor

One topic has dominated emails from readers this year: Windows 10. You've asked some great questions, displaying the mix of enthusiasm, cynicism and curiosity that I believe is unique to *Computeractive* readers. Many of you are happy that it's a free upgrade for Windows 7 and 8 users, but just as many appear to be thinking, 'so what if it's free - is it actually any good?'

At the heart of most emails is one core dilemma: 'should I upgrade?'. It's such an important question that we've devoted eight pages to answering it in this special issue. We give you several nuanced answers, from 'yes, immediately', to 'maybe, just not



yet', to 'no, are you mad?'. It all depends on your current operating system, and what type of PC user you are. You'll also discover whether the *Computeractive* editorial team plans to upgrade. I hope you find it useful - and please, keep those emails coming!

Daniel Booth
editor@computeractive.co.uk



THIS ISSUE IN NUMBERS

7 nanometres

Size of the smallest ever chips on a PC processor - **p7**



£1m

Fine imposed on EE for handling complaints poorly - **p9**

£299

Price of the cheapest 3D printer we've ever tested - **p27**

HOW TO USE SNIPCA URLS

We use snipcas to turn long URLs that are hard to type into ones that are short and simple. They aren't websites themselves, which means they won't be recognised if you type them into Google. Instead, you need to type them into your browser address bar, then press Enter. Doing this will take you to the correct website.

Contents

22 July – 4 August 2015 • Issue 454

In this issue...

50 Windows 10 – should you upgrade?
With Microsoft's new operating system soon available to install – we explain whether an instant upgrade is right for you and your PC

59 50 most useful Command Prompt commands
Take control of your PC with Windows' oldest and most underrated tools

60 Is your router being hacked?
Hackers target more than your PC. We explain how to keep your internet connection secure



Take command of your PC **p59**



In every issue...

6 News

11 Question of the Fortnight
Should iPlayer viewers pay the TV licence fee?

12 Letters

14 Consumeractive

16 Protect Your Tech

18 Best Free Software
MediaPortal 1.12.0

30 Buy It!

32 Competition
Win Xara Web Designer Premium 11 software

49 What's All the Fuss About? Apple Music

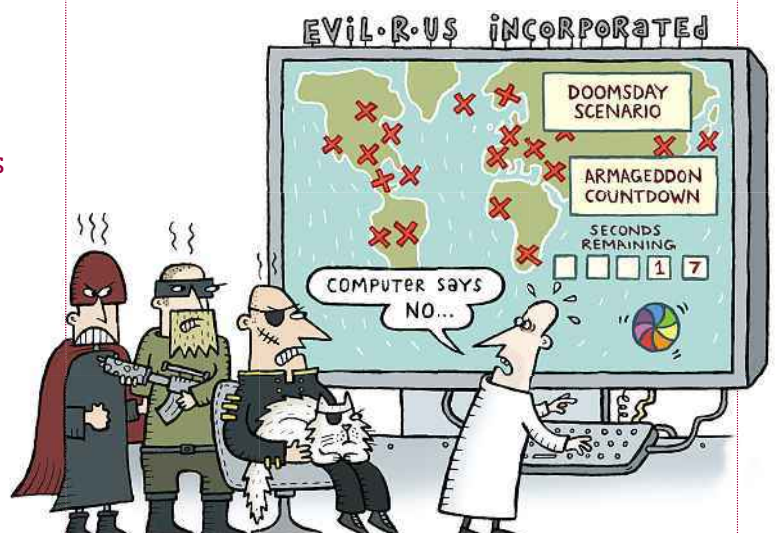
64 Problems Solved

70 Fast Fixes
Skype

73 Jargon Buster

74 The Final Straw
Stuart Andrews rues IT failures

When tech goes wrong **p74**



Subscribe NOW!

See page 62 for our special subs offer



PC Specialist Trion 960 p20



Samsung Galaxy A3 p26



XYZprinting da Vinci Jr p27

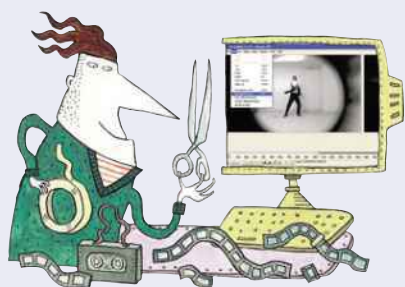
Workshops & Tips

14 pages of brilliant workshops and expert tips

35 Make super-smooth timelapse videos

38 Automatically create System Restore points

40 Create a digital scrapbook of your life



42 Make free Skype calls in your browser

43 Readers' Tips
Get more protection with Kaspersky

44 Phone and Tablet Tips
Block nuisance notifications

46 Make Windows Better
Use Windows 10's Photos app

47 Make Office Better
Create Outlook email reminders

48 Secret Tips For...
Glary Utilities

Reviews

20 PC Specialist Trion 960
A solid all-round PC

21 HP Pavilion Mini
HP's mini PC is no small wonder

22 Acer Aspire Switch 10 E
Versatile laptop-tablet hybrid

23 Lenovo Yoga Tablet 2 Pro
A giant tablet that projects video

24 Netgear Arlo
Home security with a difference

25 Ricoh WG-5 GPS
A lightweight, but durable camera
TP-Link Archer D9 AC1900
Versatile 802.11ac modem router

26 Samsung Galaxy A3
Great budget-price metal smartphone

27 XYZprinting da Vinci Jr
The arrival of affordable 3D printing?

28 Roku 2
Stream TV without Sky or Virgin cable

29 Canon PIXMA MX495
An effective MFP that takes its time

Computeractive 2014 Back Issue CD

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p54



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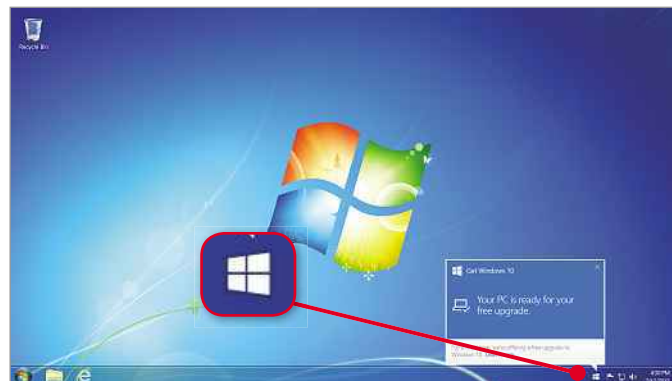
Want Windows 10 on 29 July? Sorry, you may have to wait

Microsoft has admitted that not everybody will be able to download Windows 10 on 29 July, the day it's due to be released, disappointing millions of users who were hoping to install it immediately.

It had been thought that everyone who wanted to download the new operating system (OS) would be allowed to on the day of release. But the company now says that Windows 10 Insiders (<https://insider.windows.com>) will be first in the download queue.

Windows 10 Insiders are people who signed up to test the new OS during its Preview Builds. After they have been given first bite of the cherry, Windows 10 will be delivered in "waves".

Microsoft's operating systems chief Terry Myerson explained the timetable in a blog post: www.snipca.com/17286. He said that the next group of people to receive



the download would be those who have reserved the upgrade by clicking the Windows icon in the Taskbar (see main image), and submitting their details.

He said: "Each day of the roll-out, we will listen, learn and update the experience for all Windows 10 users".

Hardware checks

Even when it's your turn to download Windows 10, you still may not be allowed because Microsoft will first check that your hardware is

compatible.

The company says it will "provide more details during the upgrade experience" for these customers, such as "contact information so you can follow up directly with an application provider or device manufacturer to learn more".

Some will see this as Microsoft passing the buck to third-party software and hardware manufacturers.

Microsoft may even let you plough on with the upgrade if it does detect problems. "For most upgrade incompatibilities, you may still choose to complete the upgrade, and find alternative compatible solutions in the Windows Store after you upgrade," Myerson said.

But he tried to reassure users by saying that most PCs will be compatible with Windows 10, as indicated when the company tested it on "millions of systems".

Compatibility problems are most likely to affect those

COMMENT

When is a release date not a release date? When it's Microsoft launching Windows 10. The company should have made it clear that it would be a staggered release when it announced 29 July as the launch date. Microsoft keeps releasing details of the new OS drop by drop, confusing and frustrating many people. We accept that this delay may last only a few days, but it still feels like a let-down. We hope the sense of anticlimax doesn't persist after we start using Windows 10.

running early Windows 7 hardware, which was released in 2009. Some people running Windows 7 may even be using older hardware, having upgraded from the unpopular Windows Vista.

Myerson also emphasised that Microsoft sees Windows as a "service". This means Windows 10 will probably be the final version of the operating system, and will be receive updates over time. Windows 11 doesn't seem likely to ever appear.

Myerson said this approach will mean Windows 10 is "continuously improved and keeps getting better".

● **Windows 10: Should you upgrade? Turn to page 50 to find out.**

Want a new PC? Look for this sticker

This is the sticker to look out for when buying a Windows 8.1 PC. It is Microsoft's confirmation that the computer's manufacturer has tested the hardware to check it will be compatible with Windows 10. Any computer with this sticker can be upgraded to Windows 10 for free.



☺ **You'll like this...** There's a new 'highlights' layer for Google Earth called Voyager (www.snipca.com/17280)

☹ **... but not this** Scam emails claiming to be from British Gas contain ransomware (www.snipca.com/17281)

Sky offers free broadband - but what's the catch?

Sky has made its cheapest fibre-broadband package free for the first 12 months in a move that will escalate its price war with BT.

Previously, the package cost £10 a month (£6 cheaper than BT's most basic Infinity package). Sky claims BT customers could save as much as £186.13 a year by switching.

The company said that customers will be able to cancel after the 12-month period ends without paying a fee. The package is capable of delivering speeds of up to 38Mbps. However, it uses BT's Openreach network, which means the speed you'll actually get will depend on the distance between the BT's street cabinet and your house.

Lyssa McGowan, Director of Sky Broadband, called the deal "groundbreaking", but there

are conditions. There's still rental to pay on your landline, (£16.40 a month), and you'll have to pay a £6.95 delivery charge for Sky's router.

Customers also have to sign up for a Sky Talk package, which starts at £4 per month for free evening and weekend calls. These are standard conditions for broadband deals.

More off-putting for many people will be the monthly data restriction of 25GB, which broadband experts warned may leave some users frustrated.

Ernest Doku, telecoms expert at uSwitch.com, said: "Given that fibre is designed

for heavier users, it might not be enough for families or people who are avid streamers and downloaders of games, movies, box sets and music".

Doku said that Sky will hope customers will grow frustrated by the 25GB limit, and upgrade to its Fibre Unlimited package – the cost of which has been halved to £10 a month for the first year.

Visit Sky's website for more details: www.snipca.com/17271.

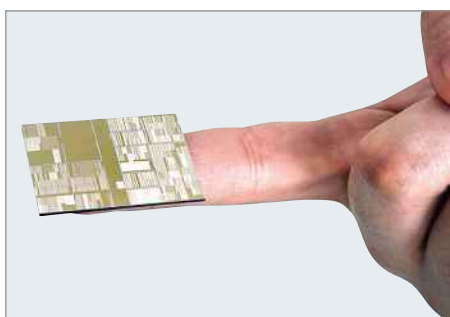


IBM reveals PC chips the size of red blood cells

In a major computing breakthrough IBM has revealed the world's first PC processor containing chips that are just seven nanometres (nm) long – just seven-billionths of a metre.

IBM believes the revolutionary new processor could help to double the average PC speed. However, the company said it won't start appearing in PCs, phones and tablets until 2017-18.

So far, the 7nm chips have been made only in laboratory conditions. IBM is working on ways to make them in manufacturing plants. The components are roughly the same size as a red blood cell, and only three times wider



than a strand of human DNA.

Generally, smaller technology means a chip requires less power, and hence can run faster without overheating. The latest processors made by IBM's rival Intel use 14nm technology. Intel plans to shrink these to 10nm next year.

The processor, which has so far cost \$3 billion (£1.9 billion)

to develop, could also help maintain the accuracy of Moore's Law. This is the prediction, made by Intel co-founder Gordon Moore, that processing power will double every couple of years as components get smaller.

It had been feared that technological limitations would start to slow the speed of processing progress. But IBM said that it had developed a technique that uses a very high-frequency laser to etch smaller patterns on to a chip's surface than had previously been possible.

The company revealed more about the process on its 'Smarter Planet' blog: www.snipca.com/17252.

IN BRIEF

NASA LETS YOU EXPLORE MARS

Nasa has launched an interactive 3D website that lets you explore Mars. On Mars Trek (<http://marstrek.jpl.nasa.gov>) you can pan and zoom around the planet's landscape, adding layers of images taken by orbiting spacecraft and locating landing sites for Nasa's missions. It's been likened to a Google Earth for Mars.



UPDATE FLASH AFTER 'HACKING TEAM' LEAK

Adobe is urging users to update Flash following a security breach of Italian-based company Hacking Team, which sells spyware software to governments. Details were leaked online, showing how a vulnerability in Flash could be exploited to remotely access PCs. Hackers quickly took the opportunity to do so, forcing Adobe to issue a fix. For information on how to update check the 'Solution' section in Adobe's latest Security Bulletin: www.snipca.com/17261.

Tomorrow's world

Researchers from universities across Japan have developed holograms you can touch. The technology fires lasers into the air, pulsing at one millionth of one billionth of a second, turning a specific point into plasma. To anyone touching it, the light feels like it has physical substance. Curiously, the researchers don't know why this happens. For more info visit our sister website Alpha: www.snipca.com/17245.

IN BRIEF

THERESA MAY 'VILLAIN OF THE YEAR'

Home secretary Theresa May was named 'Internet Villain of the Year' by the Internet Services Providers' Association at its annual ISPA Awards. They said she deserved it for "forging ahead with communications data legislation without fully consulting industry". They were referring to the Investigatory Powers Bill, which the Government outlined in May. Critics say it is a rehash of the ditched Communications Data Bill, labelled a 'Snooper's Charter'.

FIREFOX BEING BUILT FOR WINDOWS 10

Mozilla has confirmed that it will build a version of Firefox for Windows 10. It says the browser will provide an "independent and high-performing alternative" to Edge, Microsoft's new default browser, but didn't say when it would be available. Mozilla revealed the news in a blog post that also outlined how it plans to improve Firefox by making it work with new web technologies. Read it at: www.snipca.com/17225.

Let the 'smartphone generation' text 999, says report

People should be allowed to send text messages to the emergency 999 number, a report has said, because many youngsters think that calling it is no longer a "natural" thing to do.

In its 'Contacting Emergency Services in the Digital Age' report, the Institute of Engineering and Technology (IET) called for "radical changes" to be made to the 999 call services, in order to make them more useful to the 'smartphone generation' of younger people.

Prof Will Stewart, chair of the IET's communications policy panel, said: "Given that young people are statistically more likely to be victims of crime or accidents, it is a concern that making a voice call to contact the emergency services is not something that would feel natural to them".

He cited figures from telecoms regulator Ofcom showing that 94 per cent of communications from 12- to 15-year-olds is text based, and gave scenarios to demonstrate how texting 999 would be more appropriate than calling.

999

Which emergency service do you require?

Police please

"A girl alone in a minicab who becomes worried about her personal safety might feel unable to make a call on her mobile phone - but could send a text or alert someone over social media," he said.


Stewart added that texting would also be an effective option during abductions or a break-in because the victim may be able to do so silently.

The IET is encouraging representatives from the Government, Ofcom, BT and the mobile phone industry to

discuss how they can work together to modernise the emergency service.

Prof Stewart said that technology already exists to update the 999 services, but stressed that all interested parties must be consulted to make sure the system is easy for the public to use.

You can automatically download the report as a PDF from www.snipca.com/17226.

 Would you like the option to text 999? Please let us know: letters@computeractive.co.uk

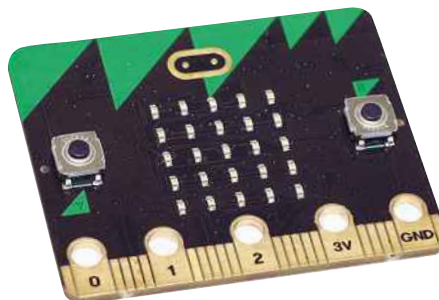
BBC to give every 11- to 13-year-old a free mini computer

The BBC has announced ambitious plans to give every year-seven child in the UK a free mini computer to help them learn more about coding.

Over a million 11- to 13-year-olds will receive a micro:bit (pictured) in October as part of the BBC's 2015 Make it Digital initiative (www.bbc.co.uk/makeitdigital).

The 4cm x 5cm board has 25 red LEDs which children can use to make games and display messages. Two programmable buttons allow the micro:bit to be used as a games controller, or to pause and play songs. Other features include Bluetooth and a built-in compass.

The computer has been called the



"spiritual successor" of the BBC Micro, the much-loved PC of the early 1980s. Partners on the project include Microsoft, Samsung, Barclays and British processor company ARM.

BBC Director-General Tony Hall said

the micro:bit will "inspire a new generation". To use it, he said, pupils just need "curiosity, creativity and imagination".

While the micro:bit may be 18 times more powerful than the BBC Micro, as well as 70 times smaller and 617 times lighter, it's far less powerful than the Raspberry Pi 2, the world's most popular mini PC.

Indeed, it's more of a controller for other devices, than a standalone PC, and could even be used as a companion for the Pi.

Later this summer the BBC will release software for the micro:bit via www.microbit.co.uk to let children program it using a PC, phone or tablet.

Finally! EU will ban data-roaming charges in Europe

UK holidaymakers travelling to Europe will no longer face hefty bills to use the internet on their smartphones, after European authorities finally reached agreement on proposals for a single telecoms market across the continent.

Under new rules announced in late June by the European Commission after two years of talks, **roaming** charges applied to internet use outside an individual's home country within the EU will be abolished.

The regulations, which come into force in June 2017, mean that while travelling across Europe you'll pay exactly the same rate that you pay at home.

Officials wanted to have the new legislation in place by 2016, but lengthy negotiations delayed it.



However interim measures will be introduced in April 2016 to cut costs. These will reduce surcharges to five cents (4p) per minute for calls or megabyte of internet data, and two cents per text message.

The Commission says these temporary reductions will cut the maximum charge by around 75 per cent.

Under the current system mobile operators can charge travellers 19 cents a minute for

calls, six cents per text message, and 20 cents per megabyte of data on top of their normal tariff.

While the announcement is good news for consumers, industry experts have warned that the rules may not be implemented because they need to be approved by the European Parliament. An earlier deal to end roaming charges by 2015 was subsequently reversed.

IN BRIEF

EE FINED £1M FOR POOR SERVICE

Ofcom has fined EE £1m for breaking the rules on handling customer complaints.

The telecoms regulator said that from 2011 to 2014 EE did not tell customers in writing that they could take their complaints to an independent body. EE said that it had made "considerable improvements" since, citing Ofcom's figures that showed a 50-per-cent fall in complaints. Ofcom pointed out that this refers only to complaints about mobile services, not broadband or landline grievances, which increased.



AMAZON OFFERS ONE-HOUR DELIVERIES

Amazon has launched a 60-minute delivery option, but only for selected parts of London, and only for customers who subscribe to the £79-a-year Prime service. The website is charging £7 for the delivery and wants you to tip the driver. If the London trial is successful, Amazon is likely to expand it to other major cities. More details at: www.snipca.com/17215.

OH FLIP! 'NEW FACEBOOK' BANS SWEARING

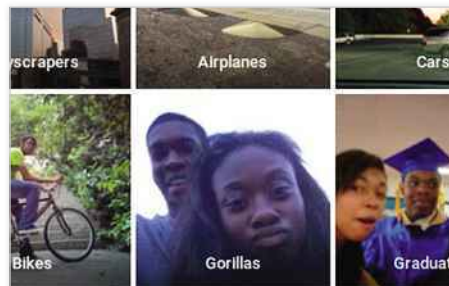
More than 100,000 people have joined a Brazilian social network where swearing and erotic content are banned, its creators claim. A group of evangelical Christians based in São Paulo launched the Portuguese-language Facegloria (<http://facegloria.com>) in June in order to provide an online haven from "violence and pornography". Members are forbidden from using swear words and sexually explicit terms, while pro-gay content is removed.

Google sorry for tagging photos of black people 'gorillas'

Google has apologised and said it was "appalled" after its new Photos service (<https://photos.google.com>) mistakenly tagged black people as gorillas.

The embarrassing glitch was caused by the tagging feature in Google Photos. This uses artificial-intelligence software to automatically group types of photos, such as 'sunsets', 'weddings' and 'dogs'.

The failure came to light on Twitter, when Jacky Alcine noticed the service had wrongly applied the tag to photos of his friends. "Google Photos, y'all f***** up. My friend's not a gorilla" he tweeted, before pasting a screenshot (above) of the error.



Google engineers immediately set about correcting the error. Yonatan Zunger, chief architect of social at Google, contacted Mr Alcine and asked for permission to examine the data in his Google Photos account, so the company could prevent similar incorrect tagging in the future.

Zunger issued a fix and later tweeted in reply to Mr Alcine:

"Sheesh. High on my list of bugs you never want to see happen."

He also said that Google was working on how software could better recognise

"dark-skinned faces".

A spokeswoman for Google UK told the BBC: "We are taking immediate action to prevent this type of result from appearing. There is still clearly a lot of work to do with automatic image labelling, and we're looking at how we can prevent these types of mistakes from happening in the future".

Named & Shamed

Jane Hoskyn puts the boot into tech villains, jargon-spouting companies and software stuffed with junk

WARNING - Junk ahead

Junk offender: Free YouTube Downloader

Remember how excited you were when you got your first video recorder? Probably not as excited as Rick from '80s comedy *The Young Ones* (www.snipca.com/17289) but pretty happy nonetheless.

Fast forward 35-odd years and we're still in love with the idea of recording video to keep, especially from YouTube. Software developers know this, and they take advantage by offering useless, adware-ridden tools.

Wajam, bam, thank you ma'am

Free YouTube Downloader (<http://youtubedownloader.com>) is currently particularly popular. Its Download button takes you to Cnet (<http://download.com>), a site so riddled with PUPs that I'll devote this whole page to it one day.

The program's installer doesn't hesitate



Free YouTube Downloader is packed with PUPs and classed by some sites as malware

to offer a couple of unwanted extras: search engine Wajam and something called Safer Browser, which doesn't sound very safe to me.

The installer claims to let you decline them, but I've been burned too many times by PUPs that hijacked my hard drive despite being 'declined'. I wouldn't recommend going anywhere near the Free YouTube Downloader installer.

Get rid of YouTube downloaders

It would be unfair to conclude from these unwanted extras that Free YouTube Downloader is a bad 'un. Plenty of programs offer extras – Skype's installer offers the Bing search bar, for example.

But it didn't take me long to find dozens of online pleas for help from people who've been 'infected' by Free YouTube Downloader and can't get it off their PCs. There's a detailed removal guide on the Malware Killers site (www.snipca.com/17291).

The tool is far from being a lone offender – its PUP-infestation is very typical of YouTube downloaders, so I advise steering clear of all of them. If you really want to save a YouTube video, use the 'Capture mode' tool in free media suite VLC (www.snipca.com/17292; see Secret Tips, Issue 453). Or use my genius trick: bookmark its YouTube page.

What are they talking about?

What they say
HTTP/2 (<http://http2.github.io>): "HTTP/2

HTTP/2

is a replacement for how HTTP is expressed 'on the wire'. It is not a ground-up rewrite of the protocol; HTTP methods, status codes and semantics are the same, and it should be possible to use the same APIs as HTTP/1.x to represent the protocol."

What they mean

HTTP (hypertext transfer protocol) is the process by which data moves around the web, and HTTP/2 is the same but better. If you like jargon, you are going to love HTTP/2's Wikipedia page (www.snipca.com/17293).

Jane's villain of the fortnight District Court of Espoo

The most learned judges of Espoo (stop sniggering at the back – it's a city in Finland) recently chose to let a prolific hacker off with a slap on the wrist, citing his young age and his lack of "capacity to understand the harmfulness of the crimes".

What was he, six? No, he was 16. Julius Kivimäki, aka Zeekill, broke into 50,700 computers, including thousands at MIT (Massachusetts Institute of Technology), to steal credit-card details that he used to buy champagne and vouchers. He's also accused of laundering Bitcoin to fund a trip to Mexico, and is a member of the Lizard Squad gang of internet vandals.

Now, while I applaud the ingenuity of

a kid who can hack the world's leading technology university, I do feel that his actions betray a certain "understanding of harmfulness" and should be dealt with appropriately. But all the court did was confiscate his computer and make him pay back £4,725 – 30 times less than he cost MIT alone in damage to its computers. Even my woolly liberal conscience got frayed by that.

Computer fraud is a devastating menace that exploits people's (and institutions') naivety when it comes to tech security. Courts have got to start taking it seriously.



Want to nominate a villain of the fortnight?
Email us at editor@computeractive.co.uk

Question of the Fortnight

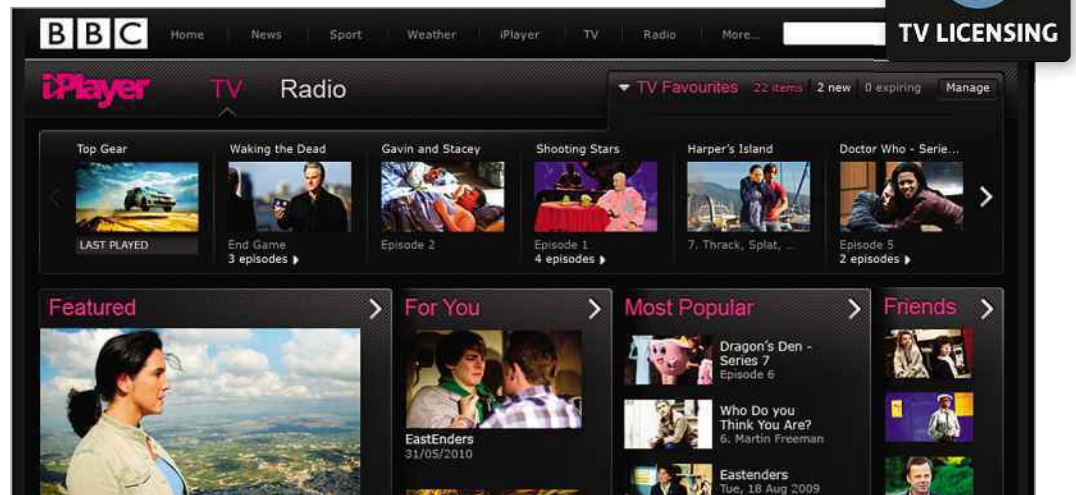
Should iPlayer viewers pay the TV licence fee?

The BBC is to close the loophole that allows people to watch the iPlayer without paying the licence fee

For decades TV viewers have tried to dodge paying the licence fee, whether as a protest against what they see as an unfair 'tax', or simply to save money.

The arrival of the BBC iPlayer in 2007 gave them the required loophole. The law currently states that viewers only need to pay the fee if they watch television as it's being broadcast, allowing anyone who only watches 'catch-up' TV on services like the iPlayer to avoid the fee without breaking the law. It's a loophole the BBC has wanted to close for a long time.

Most of us watch a combination of catch-up services and TV as it is broadcast. But increasing numbers of people, especially among the under-30s, only use the former, watching programmes on computers, phones and tablets. In 2014 3.5 billion programmes were



take over from the Government the £650m funding of free licences for people aged over 75. As part of the deal, the Government says it will speed up legislation that permits the BBC to charge for use of the iPlayer.

Frequent iPlayer viewers unhappy about the change argue that the fee should apply only to people who own

until the past 10 years, you paid the TV licence because you owned a TV set - and you only owned a TV set in order to watch programmes.

The internet has broken that link. The BBC now argues that if you watch its programmes, you should pay the fee, whether you own a TV or not.

Nobody's pretending that this extra money will bring in the £650m the BBC needs to pay for free over-75 licences, but without it the future of the corporation could be in doubt. Chancellor George Osborne said that if the Government doesn't address the challenge posed by "massive technological changes", the income earned from the licence fee will "slowly disappear".

What remains unclear is how the corporation would make people pay. One method would be to ask viewers to type a personal code that gives access to programmes. Currently, anyone who wants to watch live BBC channels on iPlayer - which does require a

“Without the extra money the future of the BBC could be in doubt”

downloaded or streamed from the iPlayer. This catch-up revolution has led to a fall of £150m in the amount of money raised from the fee in the past 12 months.

The corporation needs to find that missing cash from somewhere. It has already announced plans to slash 1,000 jobs, but that will save only £50m. And money will be tighter after the BBC agreed to

a TV set. Why should they suffer just because their viewing habits don't suit the BBC's business model?

But both the BBC and the Government say that the licence fee is out of date. When it was introduced in 1946, nobody could have imagined that viewers would in the future be able to watch programmes on demand days after they were broadcast. Up

THE FACTS

- The Government says it will let the BBC charge the licence fee to people who watch programmes only using iPlayer
- Currently, you don't need a licence to watch catch-up TV on online services such as the iPlayer
- The BBC needs to recoup a £150m shortfall in licence-fee revenue

licence - only has to tick a box to say they have one.


Many media analysts have called for the BBC to move to a subscription model, to reflect changing TV-viewing behaviour. That could mean iPlayer-only viewers paying less than the full £145.50. Such a solution would keep iPlayer converts reasonably satisfied, while also helping the BBC balance the books. Whatever happens, it's clear the existing licence fee belongs to a bygone age. Updating it for the digital era is crucial.

Letters


Tell us what's on your mind

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Facebook: www.facebook.com/computeractive
Twitter: [@ComputerActive](https://twitter.com/ComputerActive)
www.twitter.com/computeractive

Not a Windows 10 fundamentalist, just 'enthusiastic'


 I think Philip James is being unfair in his Star Letter in Issue 453 when he describes Derek Key as a Windows 10 "fundamentalist". I would say that Mr Key was just being enthusiastic about an operating system he is looking forward to downloading. What a cynical world we live in if someone is labelled a zealot just for being excited about something.

Bill Coles

 Philip James comes across as a pompous killjoy. Like Derek Key I'm looking forward to Windows 10 because I think Microsoft have got it right this time (they got it very wrong with Windows 8). That doesn't make me a "fundamentalist". It means I'm a keen computer user who loves trying new things. And new things don't get any more significant than new versions of Windows. *Computeractive*, don't listen to people like Mr James. Lots of us want to learn more about Windows 10.


Patrick Cairns

Dancing a jig when Windows 10 arrives

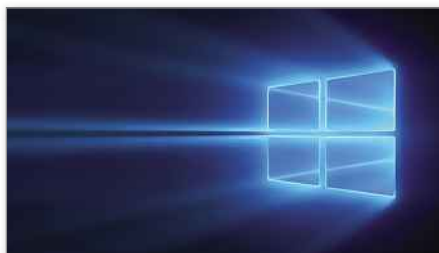
 In Issue 453 you asked whether Windows 10 is being launched too soon. My one-word answer: no. I wish it had been released about two years ago, the day after I stupidly upgraded to Windows 8 from XP. I've been regretting it ever since. I shall be downloading Windows 10 at one second past midnight on 29 July, and dance a little jig of delight as Windows 8 disappears from my life forever.

Joseph Hamilton

Windows 10 wallpaper is a 'dungeon window'

 Microsoft loves to talk nonsense, as you often report. I see that in News, Issue 453, the company said says the Windows 10 Desktop wallpaper was created using "falling crystal dust" (see screenshot above). Well, that may be the case, but it still looks like the window in a medieval dungeon, or Microsoft's homage to the door-smashing 'Here's Johnny!' scene in *The Shining*.

I much prefer the shiny wallpaper of previous versions of Windows. My favourite was XP's landscape photo. It got



me through many a dull day in my drab civil-service job, before I retired.

Keith Schofield


'Look at me' holiday photos turn me off Facebook

 I'd like to add another Facebook annoyance to the 'kids and kittens' identified by Stuart Andrews (The Final Straw, Issue 453). It's when people go on holiday, take 'look at me' photos, then plaster them all over Facebook to show off.

I can understand why you'd want to share photos with family members, but that's what email and WhatsApp is for. I love to see photos of my grandchildren playing on the beach when in Spain, Greece and so on. But I don't care if some distant friends are on some expensive cruise and want to show everyone they've been invited to eat at the captain's table. Big deal. So what? Decades ago we would


take photos for ourselves, preserving memories for the future. Facebook has made people (and not just youngsters) self-obsessed. They take and share photos hoping it will make other people jealous, not to look back on them in years to come

Ted Stone

 I can't help but agree with Stuart. I know someone who posted a photo of their cute-looking deceased cat on Facebook, "asleep" on his bed.


Richard J Pickering

Phone addiction in kids: 'parents to blame'

 I agree with Duncan Grayson's view that the youth of today are too obsessed with their phones and tablets. But I don't blame the kids. I blame the parents. I'm always seeing parents ignoring their children while they stare blankly at their phones. We all know that children look up to and copy their parents. They are bound to grow up addicted to phones if their parents can't drag their eyeballs away from their phones for just two minutes. These children need a lesson in manners, but their parents aren't equipped to give it.

Ruth Kendrick

Forum moderators face abuse from members

 Malcolm Carpenter obviously has never been a forum moderator ('Moderators on forums adopt autocratic attitude', Letters, Issue 453). Maybe he should give it a go and experience for himself the constant problems that have to be endured from members, some of whom deliberately cause problems purely to bait the mod, others who cannot discuss anything without resorting to abuse.

There are complaints about such members from other people, counter-complaints and demands for action. That's not to mention members who think they are entitled to break all the rules and post whatever they like –



pornography links included – and then complain about, and frequently threaten, the mods when they take action. Mr Carpenter should walk a mile in a mod's shoes before making such sweeping judgements about "power going to their head".

Don Griffith, eight years continuous mod experience

PC World tried to flog me extra software

✉ I subscribe to *Computeractive*, but I do not usually write in, in the style of “Disgusted of Crawley”, as it makes me think of Victor Meldrew. I went to the PC World in King’s Lynn to purchase an Acer laptop for my mother. I only wanted the laptop. The salesperson flatly refused to sell it to me unless I also paid £30 for backup discs and McAfee software for another £30. I was absolutely furious as this young whippersnapper, barely able to grow a beard, was treating me like an idiot. He lost the sale. I walked away and ordered the laptop online with free delivery. I’ve heard people lament that face-to-face shopping is dying because of online shopping. I say, after that experience, “viva la internet!”

In defence of sales staff, I went into the Tesco in King’s Lynn to buy a Hudl 2 for my dad. I have to say the experience was entirely different. The staff were friendly and helpful, and they didn’t give a monkey’s if I didn’t buy the warranty.

Debbie Moth

It’s not just Amazon: we’re all ‘greedy and self-centred’

✉ I agree with Geoff Hodgson’s letter (‘Annoyed by eBay and Amazon – but I’ll have to stick with them’), and what he suggests is exactly what I plan to do as soon as I’ve found a way to change the nature of mankind: ie that we are all after profit for ourselves. We are all greedy, acquisitive and self-centred, and inconsiderate of others – especially if we don’t know them. This is why companies will continue to raise prices until they reach a point where sales suffer.

I’m sure that Mr Hodgson does the same when he sells on eBay – charging what the market will bear. We live in an unfair world because it’s populated by unfair people, although no one complains when life is unfair in their favour. If you can help me with this, I will then set up what he desires. I will also be able to rid the world of wars, which is a plus. Meanwhile, Geoff, dream on and keep taking the tablets.

David Batty

Royal Mail’s junk-mail onslaught bad for environment

✉ I think the proposed scheme to send out junk mail if we click on a product online is terrible (News, Issue 453). First, it will be a pain in the neck for

STAR LETTER

Customers should make life easier for time-pressed couriers

✉ I feel that I must respond to the many comments made by readers with regard to courier deliveries. To date all the comments that I have read have originated from disgruntled recipients of deliveries that they have felt were inadequate for one reason or another. I would like to offer a viewpoint from the other side of the coin.

People should be aware that the courier delivering to their door will have to make, on average, 120 deliveries that day (for a typical urban round) and will be given little more than a minute at each address. By doing the maths it is easy to work out that a mere 30-second delay at each address results in an extra hour added to that courier’s working day, which is time they are not paid for.

People who order goods online for home delivery need to take some responsibility for ensuring that deliveries live up to their expectations. Before ordering they should:

1. Make sure that a house number or name is clearly visible from the street.
2. Make sure that door bells are working.
3. If you are expecting a delivery later in the day when it is getting dark, please switch on an outside light so the



courier has a fighting chance of reading the house name/number.

4. Identify a safe place for deliveries to be left.

5. Finally, try to avoid the words that chill all couriers’ hearts when they ring the doorbell and hear “just a minute”. Translated into Courier-speak this means: “I’m going to be late finishing again”.

While I fully appreciate that there are plenty of examples of bad practice (usually due to a lack of common sense), I wish that online shoppers would give a little more thought to how they can influence the success of their deliveries.

Mark Everest



The Star Letter writer wins a *Computeractive* mug!

the recipient. We get far too much unsolicited mail already – some via the postman, other types come in the plastic bags that magazines are sent out in these days. Once it has arrived it will go straight into the recycling box, and the local council will have to remove it, for which we pay via the council tax. If every household suddenly started receiving leaflets as a result of their web browsing (imagine a family with a couple of children all active on the web), I can visualise the recycling system getting choked.

Second, the Royal Mail will have to arrange to get all this junk to its many



distribution centres all over the country and then out to the delivery routes. The cost in transport, fuel, pollution, etc will be considerable. Third, all this rubbish will have to be sourced (more trees cut down), processed, printed

and shifted about – more pollution and waste of the planet’s resources.

So, taking all three points together, it makes a mockery of the whole idea of trying to get our daily lives a bit ‘greener’. Please note that I am not a member of any green organisation. I am just an extremely exasperated elderly citizen.

Ian Sheppard

Consumeractive

Who's responsible for honouring cashback promos?

Q I had a hard time getting Lenovo to honour a cashback deal for £30 when I bought a laptop from Ebuyer. Ebuyer insisted it was Lenovo's problem because it was offering the cashback so couldn't help me. Lenovo finally paid, but who's responsible for honouring this cashback deal?

Gwyn Hughes

A This was a promotion run by Lenovo so it has to honour it. But is there ever a time when a retailer promoting a cashback deal has to bear some responsibility? Even though the cashback is offered by a manufacturer, the retailer also benefits because it helps to generate more sales. A judge may decide that the retailer is a benefactor of the deal and therefore partly responsible for ensuring the offer is honoured.

If the retailer knows a cashback deal will not be honoured, then it's complicit with the manufacturer in misleading the customer. This is a criminal offence that should be reported to Trading Standards (www.snipca.com/17068). If the terms to claim the cashback are impossible to meet you could also claim under the Unfair Terms in Consumer Contracts Regulations.



Can I now cancel a poor broadband service?

Q I read your article (News, Issue 452) about Ofcom updating its Broadband Code of Practice (CoP), meaning you can leave a contract without penalty at any time if you're not getting the promised minimum speeds. I've had this problem with TalkTalk but have four months of my contract left. So does this mean I can cancel now without paying a penalty?

Maria Margolis

A Maria can't use the protection of the new CoP because it doesn't come into force until 1 October. What's more, it doesn't work retrospectively, applying only to new contracts signed from that date. This applies to new customers who have switched to TalkTalk and existing customers who upgrade their TalkTalk contract (read more at www.snipca.com/17108).

So as regards Maria's case, TalkTalk's bound by the present CoP and because she's had the service for eight months she can't even take advantage of the current "get out" clause. This says if you're not getting the promised minimum speeds, you can cancel without penalty, but only within the

TalkTalk

first three months of the contract.

But remember, the CoP is voluntary, meaning Ofcom has no legal powers and can only remove an ISP from the list of participating companies, which doesn't help customers.

But Maria can take legal action if she can't resolve the matter. She should take her complaint to an ombudsman. In TalkTalk's case this is the Communications-Ombudsman Services (www.snipca.com/17109). She needs to get a deadlock letter from TalkTalk setting out what it's done to try to resolve her complaint, then give this to the ombudsman. The ISP is legally bound to abide by the ombudsman's decision, but Maria isn't, so she could consider taking this to the small claims court for breach of contract.

Ofcom has given participating ISPs until 1 January 2016 to ensure compliance with the new CoP. But if you sign a new contract from 1 October and have problems, even if your ISP isn't fully compliant for the rest of this year Ofcom told us you should still speak to it about leaving without



Is my Devolo DLAN Starter Kit faulty?

Q I bought a Devolo DLAN 1200+ Starter Kit from Box (www.box.co.uk) for £118.99. At first all was fine until I got a phone call from my neighbour to say he had lost his BT connection but was able to log into my Sky network, and even more worryingly on to my computer. Surely something's very wrong. Could you give me some advice?

Pat Bellay



A This is quite a difficult case to assess, because from a technical perspective we've no idea why this is happening and until we do we've no idea if Pat has a legal case under the Sale of Goods Act for 'goods not fit for purpose'. But we'll dig a bit further to try

to discover what the technical issues are.

From a legal standpoint, there's not much Pat can do. The kit's certainly working and unless we

find otherwise, doesn't appear to be inherently faulty. Also, Pat's way outside the time limit to 'reject' the kit under the new Consumer Contracts Regulations 2014. This gives you only 14 days to tell a retailer you're returning an item.

A few weeks after first emailing us, Pat got back in touch to say that Box has offered him a 75-per-cent refund. It's not legally obliged to offer any refund at this time, so Pat said he'll contact the company to see if it's going to honour this offer.





We stand up for your legal rights

✉ Contact us so we can investigate your case

Email: consumeractive@computeractive.co.uk

Write: Consumeractive, Computeractive, 30 Cleveland Street, London W1T 4JD

Please include both your phone number and address.

Unfortunately, we can't reply to all your letters.

Do I have any rights after a warranty has finished?

Q My Xbox One controller developed a fault with the left-hand analogue stick only a few days after the one-year warranty expired. Microsoft is refusing to replace the controller. What are my rights?

Darren McCambridge

A Darren has rights under the Sale of Goods Act if the controller is inherently faulty, but because he's had it longer than six months, he's going to have to prove this and that the problem is not down to accidental damage or wear and tear. This will probably mean paying an

accredited electronics repair company to examine the controller. If its investigation shows the controller is inherently faulty, the retailer is legally obliged to reimburse the cost of the investigation and give Darren a repair or replacement.

Darren should first contact the retailer he bought the controller from. He should tell them he's going to have the controller examined because a retailer is entitled to know what action a customer is intending. Plus, while it can also carry out its own tests afterwards, it may decide to repair or replace a device rather than face additional costs.



CASE UPDATE



Corel refunds reader for misleading advert and import tax

There has been an excellent outcome for David Lee, whose case we reported in Issue 450. He'd paid £49 for Roxio's Easy VHS to DVD 3 software and cables, but wasn't able to record to

his PC in the way described in the advert. Plus, he was charged import tax.

We emailed Corel (which owns Roxio) for its comment and received a phone call from the company's Canadian HQ within a couple of days. After we explained David's problem to Corel, the company was extremely helpful, contacting David directly to apologise. Corel has given David a full refund, including the import tax he was wrongly charged as well as another copy of Easy VHS to DVD 3 free of charge.

We were concerned by the import tax charge however, so asked the company to explain how this had happened.

Corel told us: "Unfortunately, in February this year, our European warehouse partner closed without notice. To ensure that our European customers received their products, the orders were temporarily routed to our US warehouse for fulfilment. We're working with a new partner in the UK so European customers can be confident this won't happen again."



THIS WILL COME IN USEFUL

Password-management software contacts

1Password

Contact and help: <https://support.1password.com>
Twitter: @1Password

mSecure

Email: support@msevensoftware.com
Twitter: @mSecure4

Dashlane

Contact details:
www.snipca.com/16971
Twitter: @DashlaneSupport

PasswordBox

Email:
www.snipca.com/16974

KeePass

Help forums:
www.snipca.com/16973
Twitter: @KeePass

RoboForm

Email: www.roboform.com/faq-preticket
Live chat:
www.snipca.com/16972
Twitter: @roboform

Keeper

Online support:
www.snipca.com/17150
Twitter: @keepersecurity

Zoho Vault

Email: support@zohovault.com
Twitter: @zohocares

LastPass

Contact details:
www.snipca.com/16970
Twitter: @LastPassHelp



Protect Your Tech

Scams and threats to avoid, plus new security tools

WATCH OUT FOR...

Scam 'TalkTalk' phone calls

What happened?

TalkTalk customers have been warned that phone scammers are still targeting them, months after the criminal campaign first came to light.

In February, the ISP sent an email to every customer admitting that in 2014 criminals had stolen some account details and phone numbers, saying the total was in the "small thousands" (see News, Issue 445). At the time TalkTalk warned customers that fraudsters might phone them, pretending to be from the company. Scammers tried to trick customers into revealing their bank details, or told them there was a problem with their broadband, and that they needed to download a piece of software from the internet. Any person downloading this would give the criminals instant access to their PC.

The most recent warning came in June from the government-backed organisation Get Safe Online (www.getsafeonline.org), which said that police forces across the UK had reported a rise in complaints about scammers. Criminals are now telling TalkTalk customers that they are due a rebate because their broadband service has been poor. As before, the scammers' aim is to steal money from the victim's bank account, either directly over the phone or by gaining remote access to their PC.

The scam appears convincing because the callers are able to give their targets correct information about their account, such as its number. These were the details stolen last year.



What should you do?

If a TalkTalk scammer has phoned you, report it to the ISP on 0800 083 2710. You should never reveal your bank details to anyone who phones you claiming to work for a company. On its website TalkTalk outlines the kind of personal details it will never ask for: www.snipca.com/17149. Other ISPs have similar pages.

If you're not sure whether a call is genuine, hang up then call the company to check, using a different phone to avoid scammers who stay on the line.

New tools

If Facebook detects suspicious activity on your account, it will show you a message headed "Your Computer Needs to Be Cleaned" (see screenshot). It then suggests you run a free malware scan using a tool from one of the antivirus companies it works with, which over the past 12 months have been ESET, Trend Micro and F-Secure.

These are all reputable antivirus companies, but none has won a Computeractive Antivirus Megatest in

Kaspersky Malware Scan
for Facebook
www.snipca.com/17157

the past two years. Kaspersky has, though. In fact, it has won the past six. So we're pleased that Facebook has added Kaspersky to its roster of programs offering malware scans.

You only need to run it if you see the warning message from Facebook (and let's hope you never do). For more information click the link above to read Facebook's blog post confirming the news, or Kaspersky's: www.snipca.com/17156.

Your Computer Needs to Be Cleaned



It looks like your computer is being affected by malware. We'll help you fix the problem to keep your account secure and prevent malware from spreading to friends.

Malware is software that tries to steal personal information and causes problems when you use Facebook. Clicking or sharing links that contain spam can give your computer malware.

Get Started



ScamWatch

READERS WARN READERS

Police threat scared scammer

I got a phone call from a lady claiming to be from Microsoft. She said they had sent me an update the previous night and asked me to confirm I'd received it. After I said I hadn't, she asked me to turn on my PC so she could go through it with me. I said I'd have to speak to my supervisor as I was in an office of Greater Manchester Police, and I needed permission to switch the computer on. She then apologised for having troubled me and rang off. I have nothing to do with the police, but I've tried this before with scammers and they always end the call.

Keith Jones



Warn your fellow readers about scams at letters@computeractive.co.uk

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MEDIA PLAYER

MediaPortal 1.12.0

www.snipca.com/17248

What you need: Windows Vista, 7 or 8/8.1

Over on page 51 we gently bemoan the loss of Windows Media Center (WMC) in Windows 10, but WMC's fans shouldn't be too upset. There are far better alternatives, including VLC (www.snipca.com/17249) and this more advanced **open-source** media suite, which supports DVD and CD playback – another feature Windows 10 dumps.

MediaPortal also lets you play hundreds of video and audio file formats, stream live digital radio and TV, play games, view your photos and create slideshows. Depending on the components you choose during installation, it even lets you schedule and record TV, just like a **PVR**. This new version adds support for Closed Caption subtitles in HD, and works with 'gamepads' such as the Xbox controller – great news if you're planning to stream Xbox games in Windows 10.

Having said that, MediaPortal only works in Windows Vista to 8.1. At the time of writing, the final release of Windows 10 isn't actually out yet, and the MediaPortal installer won't

run in the Windows 10 Preview. Some canny users have created an unofficial version of the installer that works in Windows 10 (www.snipca.com/17250), but we'd recommend waiting until MediaPortal officially supports Windows 10, which is likely to happen very soon. Keep an eye on the excellent MediaPortal **wiki site** (www.snipca.com/17247) for news.

To get the program, click 'Download MediaPortal 1' and run the installer as administrator. Click Next on the first screen of the setup wizard, then 'No - I will not use MediaPortal to watch TV' (you can add this feature later) and click Next. Click 'Perform an advanced installation', click Next and finally click Install. Installation includes various components (including **DirectX 9** and Windows Media Player, if you don't already have it) but no **PUPs**. See the wiki's Quick Setup guide (www.snipca.com/17253) for configuration tips.

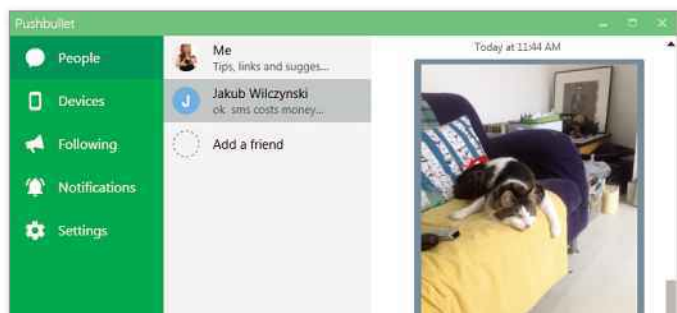


1 MediaPortal launches full-screen by default. Hover your mouse at the top of the screen to open controls including play, pause and skip. Click '<' to go back a screen.

2 Click Music to open the music player. Use the MediaPortal Configuration tool that installed with MediaPortal to import files and set up your music library (see www.snipca.com/17272).

3 Click Pictures to set up your digital photo album and create slideshows. You can also watch your home videos here. To configure the Pictures tool, see www.snipca.com/17256.

4 Click Plug-ins to play games (Tetris and Sudoku by default), add **RSS** feeds and use extensions. To configure the Plug-ins tool, see www.snipca.com/17255.



MESSAGING

Pushbullet

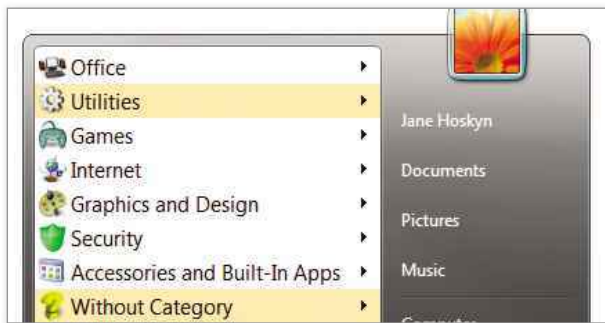
www.pushbullet.com

What you need: Windows 7 or 8/8.1

Pushbullet is our favourite free mobile app of all time (see our cover feature in Issue 453), and the infernal thing announced a radical update the day after our feature went to press. The PC program, extension and site have all been overhauled as well as the app, and they've finally got the function we've been waiting for (and, indeed, moaned about in the cover feature): a proper chat window.

As before, Pushbullet lets you send messages, photos, videos and links between your devices and to friends, instantly and for free. You can now see sent and received items in a conversation format, whatever platform you're using.

To download the program, click Apps, 'Windows (beta)', then save and run the installer. There are no extras to opt out of; even the Desktop shortcut isn't pre-ticked. For tips and advice, see <https://help.pushbullet.com>.



DESKTOP TOOL

Handy Start Menu 1.98

www.handystartmenu.com

What you need: Windows XP, Vista, 7 or 8/8.1

Upgrading to Windows 10 isn't the only way to get a better Start menu. In Windows 7 or earlier, this small program automatically reorganises your long, messy All Programs list into categories (see screenshot). In Windows 8/8.1, it creates an All Programs-style list and pins it to the customary Start menu spot. To run a program in the list you just click its entry – no more hunting for its EXE (executable) file.

Handy Start Menu is quick and easy to install, but you'll need to untick Install Reg Organizer in the setup wizard. Reg Organizer (www.chemtable.com/organizer.htm) isn't malicious, just surplus to requirements.

WHAT SHOULD I DOWNLOAD?

We tell you what software to use

Which software will help me print labels?

Q My Windows 8.1 PC came with a trial version of Microsoft Office, which included a tool for creating and printing Avery labels. Because I'm retired, I don't need the full version of Office, but I miss the label-printing function. What should I use instead?

Charles Machim

A Microsoft's Label Options tool (www.snipca.com/17181) didn't survive the jump from Office 2013 to the free web-based version of the program, Office Online (<https://office.live.com>). Word Online has some great printing templates, including financial reports and even maps (www.snipca.com/17184), but no labels.

If you wanted an alternative office suite, we'd recommend LibreOffice (www.libreoffice.org). It's free, open-source and includes label design

and printing tools (www.snipca.com/17185). But its size (220MB) and memory usage may be overkill in your case.

So instead use Avery's free web-based 'Design & Print Online' tool (www.snipca.com/17187). It lets you create labels, envelopes and other printable products from templates, or by entering a product number. Click Start Designing at the bottom of the page, then 'Labels for Letters & Envelopes' on the left (see screenshot). There's an installable version, too, if you'd prefer to work offline or without Flash (www.snipca.com/17188).



Do you need our advice on what software to use? Just email us at letters@computeractive.co.uk

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Reviews

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PC Specialist Trion 960

A fast all-round PC that's solidly put together

Slimmer and prettier may be the tech industry's current obsessions, but for many of us the perfect PC is one that can tackle anything from web browsing to video editing without stuttering to a halt, and has accessible innards for future upgrades – regardless of whether it looks like the back of a bus.

Not that the PC Specialist Trion 960 is unattractive. Its black monolith of a case, made by Corsair, is inoffensively understated, with neat white LED indicators on the front, along with two of the six USB ports and a DVD drive – often omitted from smaller machines.

Inside is a fast 3.5GHz Intel Core i5 quad-core **processor** that's been **overclocked** to make it even faster. This generates more heat, but building a PC the size of a cupboard rather than a lunchbox gives you room to fix that kind of thing. Here, a Titan Dragonfly processor cooler – a big fancy fan – keeps the temperature under control.

The catch is that this makes one of the four memory slots hard to get at. It's easy to add a second 8GB module to the existing one for a total of 16GB, which is generally plenty, but doubling up again for the maximum 32GB would take a bit

“The Trion 960 made very light work of all our speed tests”

of disassembling. Since PC Specialist builds its own systems, however, it will happily install any amount you want at the start, and without charging three times what it should cost, unlike certain fruit-based computer makers (five letters, beginning with 'A').

The Trion 960 made very light work of all our speed tests, and the Nvidia GeForce GTX 960 graphics card handled 3D apps just as smoothly. You might need

to turn down a couple of quality settings in the most demanding games, but this is very much a do-it-all system. And if you insist on doing it all at once, you can connect up to four monitors to the two **DVI** ports, **HDMI** and **DisplayPort**.

Windows 8.1 comes installed on a 120GB **SSD**, which cuts startup and loading times and avoids the little delays that can make things feel slow. But to give you room for all your photos, videos, music and work, a 1TB hard drive is also built in – the best of both worlds. As with other Windows 8.1 PCs, you can upgrade to Windows 10 free of charge.

If that's not enough, there's still a **SATA3** port left inside after the SSD, hard drive and DVD writer, so you could install another hard drive, a Blu-ray drive or a memory-card slot. An **M.2** port on the **motherboard** could also be used for a second SSD. For other upgrades that need speed, there's a **PCI Express** x1 slot – actually two, but one's blocked by the impressively large graphics card. And there are two basic PCI slots for simpler additions, such as a TV tuner. If your PC won't live next to your broadband router, you'll want to add Wi-Fi, a £15 option when ordering.

The one thing you can't add is silence. The Trion 960 doesn't baulk when you throw more ambitious tasks at it, but it

SPECIFICATIONS

Overclocked 3.5GHz Intel Core i5 processor • 8GB memory • Nvidia GeForce GTX 960 graphics card with 2GB video memory • 120GB SSD • 1TB 7,200rpm hard drive • 6x USB 3.0 • 2x USB 2.0 • Gigabit Ethernet • Windows 8.1 • 497x210mm x430 (HxWxD) • Three-year warranty • www.snipca.com/17254



does get louder. If you don't have your headphones on listening to something else, the fan noise could get distracting at times. That's the trade-off for delivering more megahertz than you're paying for without melting.

You could pay a bit less for a reasonably capable desktop PC, but £650 plus a monitor, keyboard and mouse gets you excellent performance with no major compromises. The Trion 960 is good value for money and a Great Pick.

VERDICT: As long as you don't need the smallest or quietest PC, this is a well-specified all-rounder that won't disappoint in any area



ALTERNATIVES: Palicom Intel i5 Elite £600 This slightly cheaper desktop PC is similar in many respects, but has an inferior graphics card



MINI PC | £349 from www.snipca.com/17155

HP Pavilion Mini

A desktop computer, but smaller

There are two ways to make a desktop PC easier on the eye and therefore easier to live with: tart it up or stick it where the sun don't shine. HP's Pavilion Mini offers both options. It's clinically curvy (like the equipment at a posh dentist's) and it's so small that, instead of wedging it under your desk, you can hide it behind a monitor, speaker or pot plant.

Like other 'micro' PCs, it still manages to cram in all the parts you need to run Windows 8/8.1, which (as of 29 July) can be upgraded free of charge to Windows 10. You can even easily access the internal components for any upgrading work you may want to

“It has an attractive, curvy design but is small enough to hide behind a speaker or pot plant”

undertake. That's more than we can say for Apple's Mac mini, for example, which used to be easily upgradable, until the latest model made things more difficult.

A sticker warns you that opening up your Pavilion Mini will void the warranty. What this really means is that if you add your own parts, HP may not be able to diagnose a fault later. It's like returning a cheese sandwich saying it tastes funny, after adding your own pickle. But the usual consumer protections still apply, including the mandatory EU two-year warranty and your six-year Sale of Goods Act rights (both against the retailer, not the manufacturer). Canny upgraders will keep the original components to swap back in if necessary.

The model we tested, the 300-030na,



has an Intel Core i3 processor, which is adequate for everyday tasks. You can get versions for as little as £249 with a cheaper Pentium processor, but don't get too excited, because in our tests even the i3 managed less than half the performance we'd expect from a full-size PC with the same chip. The built-in Intel HD Graphics 4400 graphics card will cope with the likes of Minecraft, but not more demanding 3D games.

Still, the Mini has all the basics for use as your main PC. You can import all your photos and videos, using the memory card reader or one of the four USB 3.0 ports, and keep them on the 1TB (1,000GB) hard drive. For comparison, the Acer Revo One RL85 (see our review, Issue 449) costs the same and is equally stylish, easier to open and has twice the storage, but it's not as compact.

There are even smaller options, such as Intel's 'Next Unit of Computing' (NUC) D54250WYK (£290 from www.snipca.com/17158), but with no room for a standard hard drive you're limited to the smaller capacity of an SSD. You get more processing power for your money, though.

SPECIFICATIONS

1.9GHz Intel Core i3 processor • Intel HD Graphics 4400 • 4GB memory • 1TB 5,400rpm hard drive • Gigabit Ethernet • 802.11n Wi-Fi • Bluetooth 4.0 • Windows 8.1 • 144x144x52mm (HxWxD) • One-year warranty www.snipca.com/17155

HOW WE TEST

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PRICES

Our reviews contain a link to the best price we found online at the time of press.

VERDICT: HP's compact system shows that small may be beautiful, but it's not necessarily quick



ALTERNATIVE: Acer Revo One £350 Has a taller case that's easier to get in to for upgrading, and similar features, but 2TB of hard-drive space



LAPTOP-TABLET | £280 from www.snipca.com/17262

Acer Aspire Switch 10 E

Laptop? Tablet? Windows 10 helps to blur the lines

On your first glance at this very compact portable PC, you might be forgiven for thinking the 'netbook' was making a comeback. On closer inspection, however, the Acer Aspire Switch 10 E is a 'convertible': a touchscreen laptop that also works as a tablet. It comes with the full Desktop version of Windows 8.1, and is ready for a free upgrade to Windows 10.

We tested this model's predecessor, the Aspire Switch 10, last year (see Issue 428). Acer has improved the hinge considerably from the original rather flimsy connection: a gentle pull separates the screen from its keyboard dock, and when you want it back together again, magnets lock it into place with a satisfying click.

Thanks to this effective arrangement, the Switch 10 E is a veritable shape-shifter, offering modes including laptop, tablet and tent. The last doesn't mean you can actually bivouac under it, unless you're the Borrowers, but folding the machine into an inverted 'V' makes it act as its own stand for watching videos or showing a PowerPoint presentation.

“It's constructed mainly from plastic that feels a bit cheap and tacky”

The Switch 10 E comes in a choice of bold colours, including pink, orange, blue and purple, as well as a more restful black. Unsurprisingly for the price, it's constructed mainly from plastic that feels a bit cheap and tacky. The cross-hatched texture at least makes the whole device easy to grip, and won't pick up fingerprints. At 1.2kg (including both parts), it's a lot heavier than a tablet and not exceptionally light for a small laptop.

The display has a disappointing 1280x800 resolution, and the combination of small size and low detail makes images look fuzzy and busy



websites feel cramped. The screen is at least bright, with wide viewing angles. You can connect a second monitor to the **micro HDMI** port.

This is strictly a system for basic tasks: the Intel **processor** may have four cores, but it's still an Atom, Intel's euphemism for 'slow', and a paltry 2GB of **RAM** doesn't help. You can watch videos, but this is not the PC for editing them, or playing 3D games. One benefit of a processor that doesn't do very much is that it doesn't use up much battery, so the Switch 10 E lasted us just shy of 10 hours without power in moderate use.

Upgrading the operating system on a slow PC isn't always a great idea, because newer software can make it struggle even more. But we've seen Windows 10 play fairly nicely with Atom systems, and with its balance of Desktop and touchscreen approaches it seems ideal for a machine like this.

Just 32GB of flash memory is included to store your files. You can slot a **microSD** card into the screen section for up to 64GB more, but SD cards are relatively

slow, so this could make the Switch 10 E feel even less responsive. The keyboard dock has a USB port for accessories. Acer mentions a model with a 500GB hard drive built into the keyboard that's security-locked to work only when your tablet section is connected. It sounds like a good idea, but we haven't seen it yet in the UK.

The keyboard itself is comfortable to type on and about as well-spaced as you can expect for a 10in laptop. A decent-sized touchpad is built in, if you prefer this to swiping on the touchscreen.

The Aspire Switch 10 E is an interesting choice if you have only basic computing needs. But if you really need a more capable system, or simply more space for photos, videos and other media, don't let the cute format sway you.

VERDICT: This hybrid system gives you some versatility at a low price. Just don't expect miracles from its build quality or performance

★★★★☆

ALTERNATIVE: HP Pavilion x2 10 (2015)
£280 HP has also changed the design of its comparable hybrid, which is now more laptop-like – but similarly lacking in performance



SPECIFICATIONS

1.33GHz Intel Atom Z3735 quad-core processor • 2GB memory • 32GB SSD • 10.1in 1280x800-pixel touchscreen • 2-megapixel webcams front and rear • 802.11n Wi-Fi • Windows 8.1 • 23x262x180mm (HxWxD) • 1.2kg • One-year warranty www.snipca.com/17263

TABLET | £335 from www.snipca.com/17176

Lenovo Yoga Tablet 2 Pro

A giant tablet with a built-in projector

There's a reason why we talk about the march of technology – not the sprint. When you look back 20 years, of course, it's absolutely amazing what we have now. But that doesn't mean every new gizmo that gets made arrives in the *Computeractive* office to a collective gasp of astonishment. Week by week, we can pretty much guess what Silicon Valley is going to throw at us next. A slimmer this. A faster that... yadda yadda. Sometimes – and don't tell the boss we said this – but it can all begin to feel rather predictable.

Then Lenovo sends you a widescreen tablet that's as broad as a laptop, as thin as an iPad, and comes with a built-in film projector. And you know you work in the right place after all.

Let's get the technical moan out of the way first. It's our job to review things, after all, not just gawp at them. This sliver of the future costs less than £400, so what won't surprise anyone is that it's not quite up to iPad Air 2 quality.

The Atom **processor** is as slow as anything you'll find even in budget tablets, and Lenovo's quirky version of Android KitKat makes it feel even slower. Web pages take a while to load and scroll, and this isn't the machine to pick if your interests run to top-end games or creative apps. To take advantage of the big screen, Lenovo does let you use two apps at the same time, one of them appearing in a smaller window. iPad users won't get that feature until version 9 of Apple's iOS operating system comes out in the autumn.

The 13.3in display has only a few more pixels than Apple's, but it's nearly 70 per cent bigger. You do the maths. Yes, it's not as sharp, but it still has considerably more dots per inch than most monitors. Unfortunately, its colours are relatively dull, more like an iPad Mini than Apple's flagship model.

SPECIFICATIONS

1.33GHz Intel Atom processor • 32GB flash storage
• 13.3in 2560x1440-pixel screen • 6-megapixel webcam • 8-megapixel rear camera • MicroSD slot
• 802.11n Wi-Fi • Android 4.4.2 • 222x332x22mm (HxWxD) • 950g • One-year warranty
www.snipca.com/17177



On the plus side, you can see it clearly from some distance, and it's comfortable for watching videos. Two speakers are built into the cylindrical section that runs along one edge, at opposite sides for proper stereo separation and Dolby surround sound – and they sound great. Between them, a metal plate can be folded out to act as a stand. It has a hole cut out so you can hang it on a hook – ideal for following recipes in the kitchen – or slip your thumb through for extra grip. It's 1kg though, so you won't want to hold it for too long.

So don't. At one corner is a lens that projects a video image on to a wall, automatically (or manually) adjusted to look straight. With the lights off, we got a 32in picture at a decent level of brightness. It's like having an HD telly in your pocket (albeit a very big pocket) – even if an HD telly with this level of picture quality would probably get sent back.

All right, the Yoga Tablet 2 Pro isn't perfect. And contrary to Lenovo's 15-hour estimate, the battery only lasted a bit over seven hours. But allow us our moment of excitement. Danger Mouse would use this. That's enough to brighten up our day.

VERDICT: Don't buy this unless you really want the projector and can put up with the slow operation. But there's no better device for watching videos

★★★★☆

ALTERNATIVES: Lenovo Yoga Tablet 2 (10.1in) **£190** A better deal without the projector
Samsung Galaxy Tab S 10.5 **£350**
Superior screen quality and performance



The best... Folding chargers

ThinCharger

£11 from www.snipca.com/17078

The first British Standards-approved folding plug remains the only one where the live pins don't move. The collapsible earth pin, as usual, is just a plastic prong to activate the socket's shutters. The ThinCharger provides 5 volts at 2.1 amps, enough for most



Mu Classic

£15 from www.snipca.com/17076

Designed by Royal College of Art student Min-Kyu Choi, the Mu folds to a neat square with just the tip of the plastic earth pin poking out. To use it, you fold two wings back and rotate the live pins into place. The single USB socket delivers 5 volts at 1 amp, suitable for phones; Mu Tablet (£24) offers higher power. An international version is in the works.



Apple 5W USB Power Adapter (Folding Pins)

£25 from www.snipca.com/17079

Sir Jony Ive's solution is the smartest yet: all three pins fold, but they're linked, so you can open and close them with one finger. It's not as flat as the others, but won't wreck your bag like a normal plug. Suitable for all phones, but not tablets.



Aulola TH31

£4 from www.snipca.com/17258

Reminiscent of the Apple charger but with independently folding pins, the remarkably cheap TH31 provides two power sockets. There seems to be one- and two-amp versions around, so check the rating if you have a tablet.



Reviews

HOME-SECURITY SYSTEM | £280 from www.snipca.com/17164

Netgear Arlo

A new way to keep an eye on your home

Put together the ideas of home automation and internet-connected gadgets, and what do you get? Up to now, usually a bit of a mess that's less convenient than turning things on and off yourself. But that's starting to change. Last year, Apple announced HomeKit, which lets iPhones and iPads control compatible products such as lightbulbs and door locks (we'll be testing some of these in upcoming issues). And in early 2014 Google bought Nest, maker of the first smart thermostat that looked like more like something out of *Star Trek* than Plumb Center.

Will Apple's or Google's system win? It may not be that simple, because there are all kinds of ways for devices to talk to each other. Here's a great example. Arlo is a home-security system that uses a special kind of Wi-Fi to connect battery-powered cameras to a central base station, which in turn plugs into your broadband router.

Battery-powered networking is something of a compromise. After all, you want a sound connection over a reasonable distance, without worrying about batteries draining too fast. Arlo does better than other standards we've tried, such as ZigBee. We even put a

“Records better footage than you'll see on *Crimewatch*”

camera in the garden, separated from our router by two plasterboard walls, a cupboard, a patio door and a short walk, and it was able to stream reliably to the base station. As long as the signal stretches that far, the internet does the rest, and you can watch your cameras' views from anywhere.

And yes, the camera worked fine in the garden – they're rated IP65 weatherproof. Each one has infrared lights to see in the dark up to 4.5 metres, and a magnetic base that's easy to point where you want. They take four CR123 batteries (the stumpy ones that look like half an AA).



Thanks to motion detection, the cameras only come on when something happens, so the batteries can last up to six months. If you were recording constantly, they'd run out in just a few hours.

The 1500mA/hr 3v lithium 'photo' batteries cost just over a pound each if you shop around. You could use rechargeables, at about twice the price, but watch out for lower milliamp-hours, meaning they won't last as long and the battery-level indicator will be less accurate. The kit we tested comes with two cameras, so that's eight batteries. Unhelpfully, the batteries are often sold in packs of six (somebody could get a great maths exam question out of this).

The cameras record at 720p 'HD' resolution, so the pictures look really clear – a lot better than those you'll see on *Crimewatch*. Of course, if you're not around to watch live, you can play back the videos later: unlike its rivals, Netgear stores them for you free of charge. You'll need a monthly subscription (from £6.49) to use more than five cameras or keep recordings longer than a week. Netgear is planning an update that'll let

SPECIFICATIONS

2x 720p cameras • Motion detection • Infrared LEDs • 71x64x41mm (HxWxD) • Base station with Ethernet • 216x165x57mm (HxWxD) • Requires 1Mbps or faster internet connection www.snipca.com/17170

you record your footage to a USB stick.

You can get the Arlo software as a free app for your Apple or Android device, or use it in a web browser on any PC or Mac. It's easy to see all your camera feeds and schedule when to record. You can adjust the motion sensitivity, although it always monitors the whole field of view, meaning you can't set it for a designated area. If you have the app, you'll get a notification when anything happens. If not, you can tell Arlo to email you.

Arlo isn't cheap (a single-camera system is £190), and replacing the batteries will be a bit of a hassle. If you don't mind running wires and want zero maintenance, it won't be your first choice. But it's a truly wire-free system that works exceptionally well.

VERDICT: This is the first home-security system we didn't get bored writing about. But it's not just fun, it's very practical too

★★★★☆

ALTERNATIVE: Nest Cam
£159 Google's mains-powered internet camera has 1080p resolution and sound, but video storage costs extra, from £8 a month for 10 days



CAMERA | £237 from www.snipca.com/17205

Ricoh WG-5 GPS

Get holiday snaps anywhere without risking your smartphone

Available in gunmetal grey or orange, this lightweight camera has two advantages over relying on your phone: it won't break if you drop it or get it wet, and its 4x optical zoom gets you closer to the action without magnifying pixels. It records the location of each shot via satellite, so you'll know where you took it as well as when.

Most electronic products that look waterproof are only 'water resistant' to the IPX7 standard, which means they can survive a temporary dunking. The WG-5 meets IPX8, 'protected against water submersion', so you can take it

SPECIFICATIONS

16-megapixel sensor • 4x zoom (25-100mm) • 1080p HD video • IP68 waterproof and dustproof • GPS • SDXC card slot • micro-USB port for charging • 61x130x31mm (HxWxD) • 236g • One-year warranty www.snipca.com/17206

swimming and shoot underwater. It's also designed to handle dropping from 2.2 metres – more than head height.

The lens sits safely behind a window, but with no cap, you'll need to keep it clean. You can shoot 1080p video as well as stills; for good results, enable autofocus and optical zoom in the menus before you start. Six white LEDs on the front light up constantly for video when you press a button on the top, but won't illuminate anything more than an inch away. The built-in flash works better for photos.

It takes pretty good pictures, with optical stabilisation to avoid camera shake, although when zoomed in it gathers less light, reducing quality. The main problem is that you have to half-press the button to focus before

taking a shot, or it uses fixed focus. This means you can only take a photo about once every three seconds if you want to make sure that it's sharp.

VERDICT: It's expensive for a basic camera, but zoom and underwater capability make this a practical travel companion.

★★★★☆

ALTERNATIVE: Fujifilm XP80 £145 This is cheaper and has Wi-Fi, a more useful feature than GPS, if you don't mind relatively dim and blurry pictures



ROUTER | £133 from www.snipca.com/17207

TP-Link Archer D9 AC1900

A sleek Wi-Fi router for ADSL and cable users

802.11ac is the latest Wi-Fi standard. Theoretically faster than 802.11n, it uses the 5GHz band, which is less likely to suffer interference, and boosts range, so you're more likely to get good reception.

The Archer D9 is TP-Link's top-of-the-range 802.11ac modem router. It supports regular ADSL2+ broadband, or can be used alongside the modem supplied with a cable or fibre (VDSL) connection. But if you do have cable broadband, such as Virgin Media's, consider the C9, which omits ADSL to save a few pounds. Neither model can replace a VDSL modem router such as BT Infinity's HomeHub 5.

The white and transparent plastic case looks stylish. Its integral stand props it at

a slight angle. At the back, four Gigabit Ethernet ports connect PCs, printers or network-attached storage (NAS) directly, although one is taken up if you're using a cable modem. There's one USB 3.0 port and one USB 2.0 to attach printers or storage without built-in networking, which you can then access over the network, albeit rather slowly.

A mini-CD (not compatible with slot-loading drives) is included with a simplified setup app, but the main way to configure the Archer D9 is from your web browser. TP-Link's interface is basic, but does the job. Our unit came with its wireless region set to US, which could mean using channels that aren't permitted by Ofcom in the UK,

so make sure you set this correctly.

In our tests, the Archer D9 wasn't the fastest 802.11ac router around, and some 802.11n models might even beat it for speed on the old 2.4GHz band. But it's still a decent performer, and competitively priced.

VERDICT: The Archer D9 ticks all the boxes at a fair price, although you could find higher speeds and friendlier software elsewhere

★★★★☆

ALTERNATIVE: Asus RT-AC68U £130 Shop around and you can find this older but faster router. It doesn't include an ADSL modem



SPECIFICATIONS

Dual-band 802.11ac/a/b/g/n • 4x Gigabit Ethernet ports (one convertible for cable/fibre modem) • 1x USB 3.0 port • 1x USB 2.0 port • 169x221x86mm (HxWxD) • Three-year warranty www.snipca.com/17217

Reviews

SMARTPHONE | £190 from www.snipca.com/17193

Samsung Galaxy A3

A metal phone for the price of plastic one

Compared with Apple's, it's hard to see other smartphones without one word springing to mind: plastic. But Samsung finally went metal with last year's Galaxy Alpha, and now you can get the same cool silvery durability (it also comes in black) in a mobile that costs less than £200 without a contract. It's also available free with tariffs from under £20 a month.

“Unlike some mid-priced phones, it has a great camera”

The Galaxy A3 is just slightly smaller than (and the same thickness as) an iPhone 6, but its screen has far fewer pixels, making it look coarser than most phones these days. Colour and contrast are excellent, though, so it's only things like tiny text that suffer any noticeable lack of clarity.

Unlike some mid-priced phones, it also

SPECIFICATIONS

4.5in 960x450-pixel screen • 16GB flash storage • 3G/4G • 802.11n Wi-Fi • 5-megapixel front camera • 8-megapixel rear camera • Android 4.4 • 130x65x6.9mm (HxWxD) • 110g • One-year warranty
www.snipca.com/17194

has a great camera that takes sharp and well-balanced pictures. The camera sticks out noticeably from the smooth rear panel, with a distinctive Samsung square shape, beside an LED flash. A more discreet 5-megapixel front camera handles video chat.

Despite the cute adverts (www.snipca.com/17221), not all of Qualcomm's Snapdragon processors are particularly exciting, and the 400-series chip inside the Galaxy A3 doesn't run Android 4.4 any better than phones at half this price. But it'll cope with most tasks, and even fancy 3D games, if you can overlook the occasional stutter. It's not just about speed: one of Snapdragon's benefits is power-efficiency. That helps to explain how our Galaxy A3 played videos continuously for 14 hours and 37 minutes before needing its battery recharged. That's not the longest we've seen, but towards the top end of the range.

16GB seems a fair amount of storage, but with 6GB taken up by Android, it may not take you long to run out of space for your apps, music, photos and videos. A microSD card slot lets you add up to 64GB more. Up-to-date 4G, NFC and Bluetooth 4.0 wireless connections are built in, along with 802.11n Wi-Fi rather



than the newer, faster 802.11ac.

It only just scrapes full marks, but the Galaxy A3 is a reasonably priced phone that's at least decent in every respect and very good in many.

VERDICT: If you don't want to shell out for a top-end smartphone, this feels classy and capable for a third of the price



ALTERNATIVE: Sony Xperia Z1 Compact £205
We recommended this back in Issue 419 and it's still a great phone for around £200



WHAT SHOULD I BUY? We solve your buying dilemmas

I have Parkinson's – is there a phone for me?

Q I have Parkinson's disease and can't easily use a touchscreen. Is there a phone that uses apps but doesn't require touch control?

John Jones

A Mobile devices can be very useful to people with disabilities, but Apple's iOS and Google's Android were designed from the ground up for touchscreens, which require the kind of unsupported fine movements that can prove difficult.

No mainstream smartphones are based on input methods other than touch, and built-in accessibility features focus on voice control, which is poorly suited to tasks beyond opening apps and dictating text. Assistive accessories such as switches help users with very limited motor skills, but only work with a few apps.

A stylus could help. These come in all shapes and sizes, from the chunky Cosmonaut (£23 from www.snipca.com/17238) to basic pen-sized models (www.snipca.com/17239). Adaptive

styluses (www.snipca.com/17240 ,

see photo) add grip and flexibility. The Faraday Caduceus with optional SALT (shallow-angle, light-touch) tip (\$33, about £22 plus shipping costs, from www.snipca.com/17242) looks very adaptable, but out of stock at the time of writing.



✉ Do you need advice on what you should buy? Email us at letters@computeractive.co.uk

3D PRINTER | £299 from www.snipca.com/17195

XYZprinting da Vinci Jr

The cheapest 3D printer so far

An affordable 3D printer that anyone can use? Stop us if you've heard this one before. We keep being promised machines that can output solid objects as easily as a Word file. But we get Heath Robinson contraptions that cost £1,000 and, after we spend three weeks asking people on the internet why nothing's working, the printer takes all night to produce a cracked plastic blob.

There's a reason why there's been so much hype around this technology for the past few years. In 1989, a man called Scott Crump patented an 'apparatus and method for creating three-dimensional objects' by controlling the discharge of a melted material on to a base. He called it 'fused deposition modelling' (FDM).

Crump's company, Stratasys, had a lot of success selling FDM machines to industry, but they were much too expensive and complicated for casual use. Twenty years later, however, the patent

“It looks like a cross between a 1990s iMac and an aquarium”

ran out. People who'd been playing around with their own FDM machines – most notably the RepRap, a worldwide **open-source** project – could now develop them commercially. Suddenly 3D printing for the masses was on the cards.

The trouble is, FDM still depends on making something messy and unpredictable highly accurate. Expect a lot of adjusting, reprinting, cleaning and adjusting again. And that's after you figure out exactly what you need to print. Not even Scott Crump has invented a way of turning gravity off while you work, so your software has to add support structures, which you'll later whittle away with a knife. Because it's impractical to make most items completely solid, internal lattice structures also have to be calculated to hold everything together.

This is why, although they keep getting smarter, domestic 3D printers are still

only for the dedicated enthusiast. The da Vinci Jr doesn't change that, but it does cost less than its rivals. As with ink in regular printers, you'll need to budget for consumables. The 'fused filament fabrication' (FFF) method – essentially FDM – uses plastic wire which costs £27 a roll.

Some 3D printers look like half-finished *Robot Wars* entries. By contrast the da Vinci Jr looks like a cross between a 1990s Apple iMac and an aquarium. It's more the size of a toaster than a microwave, so you'll need less room, but the output size is limited to 150x150x150mm – a six-inch cube. In reality, it's too time-consuming and expensive to frequently print anything as big as that.

To keep things simple, only PLA filament can be used, not the tougher ABS. This also means it's not necessary to have a heated print bed: instead, large squares of masking tape give the plastic something to stick to. Nozzle cleaning is handled rather primitively by poking a bit of metal into the extruder. One definite miss is a full complement of memory: we couldn't get our first model to print until we slotted in a 4GB SD card. At less than a fiver, that could have been included.

SYSTEM REQUIREMENTS

Single-nozzle PLA filament printer • 1.75mm filament • 0.1-0.4mm resolution • 2.6in display • USB 2.0 port • SD card slot • Requires Windows 7 or later or OS X 10.8 or later • 380x420x430mm (HxWxD) • 15kg • One-year warranty www.snipca.com/17196



The XYZware software is basic, but lets you import 3D models in standard formats, scale and rotate them, and add support. On a medium-precision 0.2mm setting, it took us 40 minutes to print a Lego-sized 2x4 brick, and eight hours for a fist-sized skull. This was after we'd manually adjusted the nozzle height by trial and error to get our plastic setting properly, and learned to anchor larger models with Pritt Stick to add extra support.

In the end, our results were better than those from many other 3D printers. That's very impressive for such a cheap and attractive machine. But it's still far too much fuss for most people to put up with, and because XYZprinting has deliberately made the da Vinci Jr incompatible with generic filament, you have to pay a fixed price for refills. 3D printing for more of us, maybe, but not yet the rest of us.

VERDICT: If you're realistic about the challenges and limitations of 3D printing, this is a competent machine at an exceptionally reasonable price

★★★★★

ALTERNATIVE: TierTime UP! Mini £509 With a smaller 120mm model size, this sturdy little printer uses ABS rather than PLA and is relatively easy to use



Reviews

MEDIA STREAMER | £70 from www.snipca.com/17197

Roku 2

Stream video from internet services to your TV

This gadget provides access to TV shows and films over the internet, a flexible alternative to Sky or Virgin cable. It's called Roku because it'll rock you! Or so we assumed, until we looked it up. 'Roku' is actually the Japanese word for 'six': it was the sixth business started by its founder. And the correct pronunciation is like the 'ro' from 'rock' followed by 'coo'. So now you know.

That's not the company's only confusing use of numbers. The Roku 2 is the 21st version of this media streamer. It's more capable than the Roku 2, from 2011, or the, um, Roku 2, which followed in 2013. It lacks some features of the new Roku 3, which replaces 2013's Roku 3 (still on sale on Amazon priced £199: www.snipca.com/17220). The Roku 1 has been discontinued, even though it was introduced less than two years ago (it was the 17th model). Instead, the third product in the range is now the Roku Streaming Stick. Version 2.

“It can receive programmes from many TV services”

Anyway, the Roku 2 is a box that plugs into your TV and plays videos from the internet. You can connect it to your broadband router over Wi-Fi or with an **Ethernet** cable. Or if you already have videos stored, you can put them on a USB stick or **microSD** card and slot it into the Roku 2. You can also play files from your PC or a home-media server. Note that the Roku 2 doesn't record, and its only output is an **HDMI** port, so you'll need a modern HDTV set. Full **1080p** HD is supported for a sharp picture.

The Roku 2 can receive programmes from more than a thousand services, including BBC iPlayer, ITV Player, Channel

SPECIFICATIONS

1080p HD video streamer • 802.11n Wi-Fi • Ethernet • USB port for memory drives • microSD card slot • 23x84x84mm (HxWxD) • 142g • One-year warranty
www.snipca.com/17198



4's All 4, Demand 5, Now TV (owned by Sky), Google Play, Netflix, Spotify and YouTube. Some of these need a paid subscription, but there's plenty to watch for free too. Using 'on-demand' or 'catch-up' services doesn't require a TV licence, though this will probably change – see page 11. You do need one if you watch programmes at the same time as they're being transmitted live on British TV. If you already have a licence, then that's fine.

Amazon Instant Video is missing from Roku in the UK, even though it's included in the US. That's annoying if you have Instant Video as part of an Amazon Prime subscription. But many 'smart' TVs already support Instant Video (see www.snipca.com/17199) and other services without needing anything plugged in. Check yours before buying a streaming box.

The Roku 3 has a fancy Wi-Fi remote unit with a headphone jack, voice-operated remote control, and motion sensing for games. If you don't need those, you may as well save £30 and buy the Roku 2. However, we found its infra-red remote was fussy about seeing the base unit clearly, so you can't hide it behind your TV. The Roku app for Apple, Android and Windows Phone devices works better as a remote control over Wi-Fi, and typing on the touchscreen is much easier for finding shows and films.

In fact, universal search could be the

best thing about Roku. But it isn't. In theory, you can type the name of a TV programme and see where to watch it. In practice, most of the services don't yet support the search function, so you end up having to look through them individually.

You can also use the Roku 2 to play video from a mobile device, just like you can with an Apple TV. But we couldn't get that to work with Netflix on either Apple or Android, and YouTube only worked on Apple. The £50 Streaming Stick, which looks like a USB memory drive and plugs into an HDMI socket, also limits what you can do from other devices: unlike Apple TV and Google's Chromecast, it can't **mirror** everything from your touchscreen, only video-player apps. But it has a lot more apps (channels) than Chromecast, and may suit you if you don't need Ethernet, USB or microSD.

VERDICT: As the mid-priced version of what currently looks like the best TV streamer, the Roku 2 is a good choice for most viewers. The omission of Amazon prevents us giving it full marks

★★★★☆

ALTERNATIVE: Amazon Fire TV £79 If you have an Amazon Instant Video subscription, this will work with it, unlike the Roku, but has fewer options



PRINTER | £48 from www.snipca.com/17174

Canon PIXMA MX495

A do-it all printer/scanner for the home

Manufacturers don't make much money from basic inkjet printers these days. Plenty in ink, but not the actual printers. Piling on more features is one way manufacturers try to stop the price falling so low that they're actually paying you. So here's the PIXMA MX495, another multifunction printer (MFP) that can print, scan, copy, and send/receive faxes.

You remember faxes. They were quicker than the post. Nowadays, you could probably get an Amazon delivery faster than a long fax. But still, the feature is there – if you keep your printer beside a phone socket. The 20-sheet automatic document feeder (ADF) does make faxing, copying and scanning lengthy documents less hassle. If you want to print both sides of the paper (duplex), though, you will have to feed it manually.

The MX495 isn't pretty, but it's a great bit of compact design. The A4 printer and scanner squat neatly below a hefty lid that incorporates the ADF trays. The control panel is nothing to write home about. The LCD screen isn't backlit, making it hard to see in dim light, and the menu requires more button presses than you'd expect. The control panel can be opened to deal with paper jams.

Five A4 pages of black text took a leisurely 45 seconds to print, while a 20-page document was churned out at 7.5 pages per minute (ppm). Despite using a USB cable rather than the built-in Wi-Fi, five basic colour pages of text and graphics took nearly three minutes (with long pauses). Photocopies were slow, too: a single mono page took 24 seconds,

SPECIFICATIONS

4800x1200dpi maximum print resolution • 8.8ppm quoted speed (mono) • 4.4ppm quoted speed (colour) • 600x1200dpi maximum scan resolution • 300x300dpi maximum fax resolution • USB • 802.11n Wi-Fi • 89x435x295mm (HxWxD) • 5.9kg
www.snipca.com/17175



colour twice that. Using the ADF, 10 mono copies took two minutes 44 seconds, but in colour the same job took 7.5 minutes.

Scanning was very quick, though, at just 12 seconds for an A4 page at 150 dots per inch (dpi), the same level of detail as a basic fax. A postcard-sized photo at 1200dpi took 57 seconds, which is also fast. The results were excellent, sharply focused with accurate colours. Copies look unusually good, too, and general print quality is more than enough for everyday plain-paper jobs.

Using the larger ink cartridges available, an A4 page of text and graphics works out at 7.5p. This is very competitive for a budget device, but at 3.1p the mono component is unusually pricey, so other models will work out slightly cheaper if you mainly print text. Overall, though, for its capabilities the MX495 is a bit of a bargain.

VERDICT: It may be inexplicably slow, but for under £50 this is a surprisingly effective multifunction printer, though you may have reservations if you tend to print a lot of mono pages



ALTERNATIVE: Canon PIXMA MG5650 £69 If you don't need fax and ADF, it may be worth the extra few pounds for this faster model with duplex printing



COMING SOON

AUTUMN 2015

According to reports, this year's iPhone 6s could have Force Touch – as on the latest MacBooks – letting you perform different tasks depending on how hard you press. Another possibility is a big camera upgrade.



AUTUMN 2015

A new Google Nexus phone is expected to be the first device to use Android M, the successor to Lollipop. Other mobile phone and tablet makers will quickly follow when the new operating system appears, probably in September.



AUTUMN 2015

Apple's iOS 9 will be a free upgrade for any iPhone or iPad that can currently run iOS 8. Among lots of new features, you'll be able to 'slide over' a different app while still seeing the one you're using. With the iPad Air 2, you can even run two apps side by side.



2016

Hard drives are big and cheap, SSDs are fast and expensive. That logic won't change soon, but Samsung's announcement of the first 2TB (2,000-gigabyte) consumer SSDs is a step in the right direction. Expect to see these in PCs soon.



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Our pick of products that have won the Buy It award

LAPTOP

Asus X555LA-XX290H
£300 from www.snipca.com/16158
Tested: Issue 446



Asus has made all the right choices with this budget Windows 8.1 laptop. Its comfortable keyboard, fast performance, respectably lengthy battery life and bright screen are all the more impressive given its low price.

ALTERNATIVE **Asus Chromebook C200**
A cheap Chrome OS ultra-portable laptop with a bright screen, lengthy battery life and a great keyboard.
£200 from www.snipca.com/17296

DESKTOP PC

PC Specialist Trion 960
£650 from www.snipca.com/17254
Tested: Issue 454

You could spend less on a usable PC, but this solid tower system has great all-round performance, including decent Nvidia GTX 960 graphics card. A 120GB SSD and 1TB hard drive offers speed and space, but Wi-Fi costs £15 extra.



ALTERNATIVE: Palicomp Intel i5 Elite
For £50 less, this is a similar PC in many respects but compromises on graphics with the cheaper GTX 750 card. £600 from www.snipca.com/17297

TABLET

Apple iPad Mini 2
£239 from www.snipca.com/14467
Tested: Issue 416



Apple's mini tablet from 2013 is now available at an even lower price. The only thing it lacks compared with the Mini 3 is a fingerprint sensor and the option of lots of built-in storage. Otherwise, it's an absolute bargain.

ALTERNATIVE: Apple iPad Air 2 A
thin and lightweight 10in tablet with a fingerprint reader, an excellent screen and peerless selection of apps. £399 from www.snipca.com/16717

PHONE

Samsung Galaxy A3
£190 from www.snipca.com/17193
Tested: Issue 454



Similar in size to an iPhone 6, this Android phone doesn't have a high-res screen or high-end performance for advanced games and creative apps, but it lasts over 14 hours on a charge, has a great camera and is reasonably priced.

ALTERNATIVE: Sony Xperia Z1 Compact
We recommended this back in March 2014 (Issue 419) and it's still a great phone. £205 www.snipca.com/11579

DIGITAL CAMERA

Panasonic Lumix DMC-GF6
£219 from www.snipca.com/16355
Tested: Issue 405



This compact, interchangeable-lens camera is small and reasonably priced, yet it has well-designed controls, a wide range of available lenses and shoots excellent quality photos. The GF6 really is unbeatable value.

ALTERNATIVE: Sony A5000 A rival CSC with better low-light performance, although its controls and range of available lenses aren't quite as good. £249 from www.snipca.com/15854

E-READER

Kobo Aura H20
£140 from www.snipca.com/15490
Tested: Issue 435



A waterproof e-reader with an easy-to-read, high-resolution touchscreen that's easy on the eyes and great for reading in the bath. There's no 3G version, but, unlike the Amazon Kindle, you can buy ebooks from independent retailers that use the ePub format.

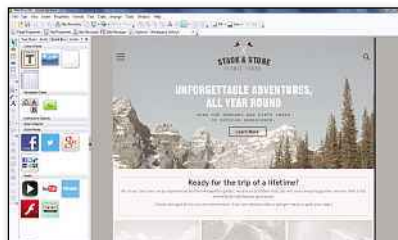
ALTERNATIVE: Amazon Kindle Voyage
The best Kindle yet, with a sharp, extremely responsive touchscreen and easy-grip design. £169 from www.snipca.com/14451

WEB DESIGN

Serif WebPlus X8

£90 from www.snipca.com/15278

Tested: Issue 443



WebPlus X8 is one of the best programs available for designing a website without having to write a line of code. It comes with lots of templates, with more available for purchase if you need them. It also has lots of specialist tools for building a small-business website.

ALTERNATIVE: JimdoPro This browser-based program for creating websites is slick and feature packed, but lacking in high-quality templates. £60 a year from www.jimdo.com/pricing

SMART TV

Samsung UE40H5500

£386 from www.snipca.com/16544

Tested: Issue 446



A 40in smart TV with great picture quality and apps for all the terrestrial TV catch-up services. It has plenty of extras too, such as recording to USB storage, playing media files stored on a NAS or USB stick and plenty of HDMI ports.

ALTERNATIVE: Sony KDL-42W705B

Excellent image quality, stylish looks and a 42in screen. £400 from www.snipca.com/16496

WEB DESIGN

Xara Web Designer Premium 11

£70 from www.snipca.com/16955

Tested: Issue 453



This visual web-design program makes creating sites more like laying out a document than writing HTML code, and sites can be 'responsive', meaning they look right on both big and small screens without extra work. A basic version is also available for half the price.

ALTERNATIVE: Serif WebPlus X8

Comes with lots of templates, but creates separate desktop and mobile versions instead of responsive sites, and can be slow to use. £90 from www.snipca.com/14964

MULTIFUNCTION PRINTER

Canon Pixma MG4250

£60 from www.snipca.com/12457

Tested: Issue 382



This budget multifunction printer (MFP) isn't the fastest available, but it's cheap to buy and inexpensive to run. Just as importantly, both prints and scans look great. Unless you need faster print speeds or separate ink tanks for each colour, this MFP is the one to buy.

ALTERNATIVE: Epson Expression Photo XP-760 A MFP aimed at photographers with an excellent scanner and peerless photo print quality. £132 from www.snipca.com/16497

SOLID-STATE DRIVE

Crucial BX100 1TB

£259 from www.snipca.com/16017

Tested: Issue 445



A blindingly fast, high-capacity SSD at a lower price than ever before. If you've been put off buying a SSD because of the cost, then now is finally the time to take the plunge.

ALTERNATIVE: Samsung 850 Pro

256GB An even faster SSD, but it is much more expensive per gigabyte. £112 from www.snipca.com/16498

SECURITY CAMERA

Y-cam HomeMonitor HD

£145 from www.snipca.com/11646

Tested: Issue 420



A home-security camera that's well priced and easy to set up. Plus, it has great picture quality, useful apps and there's no need to subscribe to any extra services. It's a worthy successor to the original HomeMonitor, our previous favourite security camera.

ALTERNATIVE: D-Link Wireless N Day & Night Camera A good-value security camera with excellent night vision. £74 from www.snipca.com/15275

SECURITY SOFTWARE

Kaspersky Internet Security 2015

£17.99 from www.snipca.com/14212

Tested: Issue 437



Kaspersky Internet Security 2015 has won our past four antivirus tests – an unprecedented set of results. The 2015 edition is available at an exclusive reader discount on our Software Store. Go to the link above for a one-device licence, or buy a three-device licence for just £39.99 at www.snipca.com/14221.

ALTERNATIVE: Avast Free Antivirus

Almost as good as Kaspersky, but sometimes blocked legitimate software. Free from www.snipca.com/16493

PHOTO EDITING

Adobe Photoshop Lightroom 6

£104 from www.snipca.com/16952

Tested: Issue 453



Adobe's Photoshop is ideal for image manipulation, but Lightroom is the better choice for managing and tweaking photos. The first choice of professionals, it's easy for anyone to use, combining technical and artistic adjustments with rating, keywording and archiving.

ALTERNATIVE: Adobe CC Photography Plan

Rather than buying Lightroom, you can subscribe for a reasonable £8.57 a month (paid annually) to use Lightroom and Photoshop www.snipca.com/17270

NEW
ENTRY

COMPETITION

Win 1 of 4 Xara Web Designer Premium 11

Xara's Web Designer Premium is our new favourite web-design software. Winning a five-star Buy It! award in Issue 453, the package has great new features that make it easier to build your website. Crucially, you can make your site 'responsive', so it looks great on PCs as well as phones and tablets. It's a must-buy for anyone looking to improve their site or build their first one. To enter, email your address to cacomp@dennis.co.uk by midnight 4 August.



Xara Web Designer Premium 11 is available to buy priced £69.99 from www.xara.com/uk/web-designer/buy. Visit that site for info on Xara's other products, including the new Photo & Graphic Designer 11. Follow Xara on Twitter @XaraGroup.

PC MONITOR

Dell UltraSharp U2412M

£205 from www.snipca.com/15271

Tested: Issue 378



An exquisite monitor with superb image quality, an adjustable stand, a high resolution and even a built-in USB hub. It costs a little more than other monitors, but it's money well spent. It's easily the best value monitor we've seen and is the one by which all others are judged.

ALTERNATIVE: AOC i2360PHU A good quality budget 23in monitor that's easily adjustable and has a built-in USB 2.0 hub too. £141 from www.snipca.com/16706

ROUTER

Trendnet TEW-812DRU

£112 from www.snipca.com/15855

Tested: Issue 427



An incredibly fast 802.11ac router that's also one of the cheapest we've seen. It's superb and it's the router to buy if you're ready to make the jump to 802.11ac.

ALTERNATIVE: Linksys WRT1900AC More expensive, but even faster and with loads of features too. £200 from www.snipca.com/14950

NAS

Synology DiskStation DS215j

£140 from www.snipca.com/16187

Tested: Issue 449



This two-drive NAS enclosure has it all – fast performance, easy configuration and plenty of extra features. Its only flaw is that installation is a little fiddly – but if you want quality network storage, then this is the obvious choice.

ALTERNATIVE: Synology DS414j A four-drive NAS that's generally fast, easy to set up and use. £244 from www.snipca.com/16707



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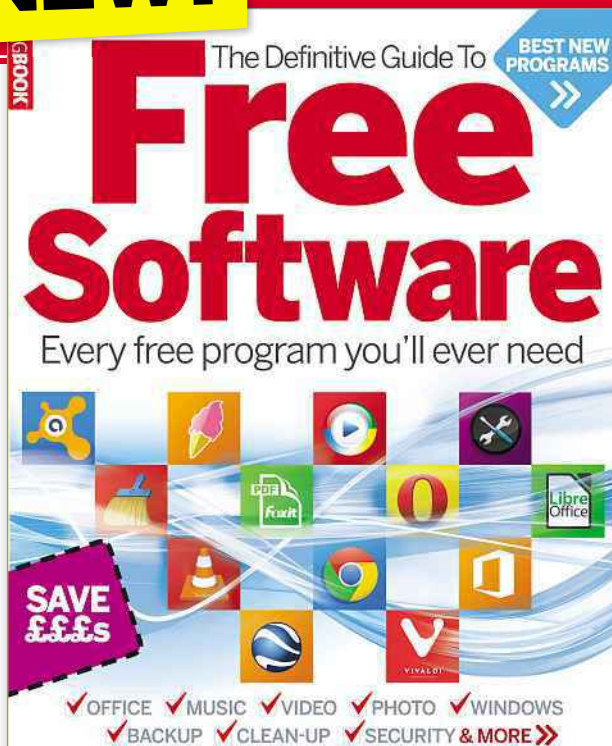
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Workshops & Tips

PULL OUT
& KEEP
Issue 454

14 pages of easy-to-follow workshops and expert tips

35 Make super-smooth
timelapse videos
38 Automatically create
system restore points

40 Create a digital
scrapbook of your life
42 Make free Skype calls
in your browser

PLUS

43 Readers' Tips
44 Phone & Tablet Tips
46 Make Windows Better

47 Make Office Better
48 Secret Tips For...
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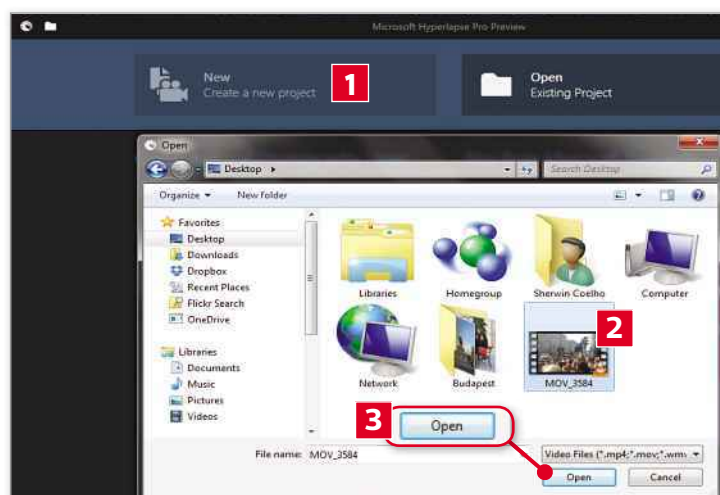
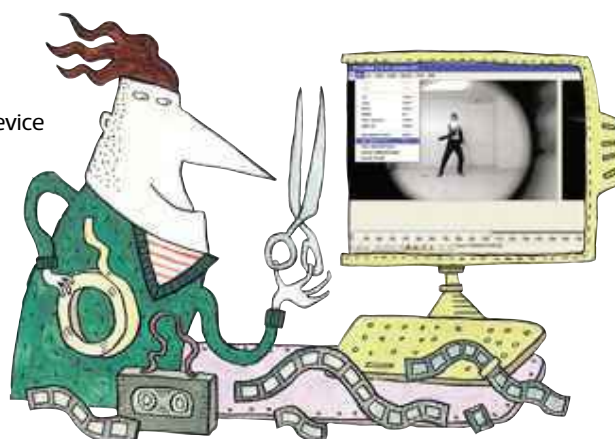
Make super-smooth timelapse videos

What you need: Microsoft Hyperlapse Pro; Windows 7, 8 or 8.1; Android device

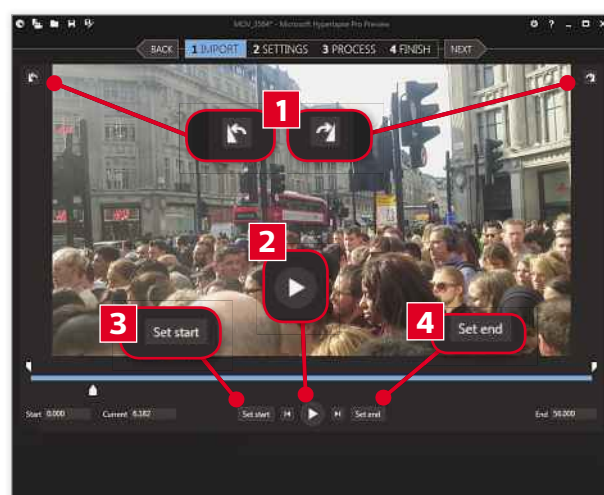
Time required: 45 minutes

Microsoft's new program and Android app Hyperlapse Pro (both free) lets you convert long videos into exciting timelapses. This is ideal to liven up videos of activities and events that take a long time, such as sunsets

and walks. The easy-to-use program and app let you trim your recorded video and choose how fast you want your timelapse to be. It also automatically smooths out shaky or wobbly sections of your video.



STEP 1 We'll first show you how to use the PC program. Go to www.snipca.com/17251 and click the Download button. Now click the downloaded setup file, Run, Next, select I Agree (to agree to the T&Cs), then click Next again (three times) to install the program. After that's done, click Close to close the setup and launch Microsoft Hyperlapse Pro. You'll see two options at the top - 'Create a new project' and 'Open Existing Project'. Click the former **1**, navigate to the video you want to turn into a timelapse **2**, then click Open **3**. The program supports all common video formats.

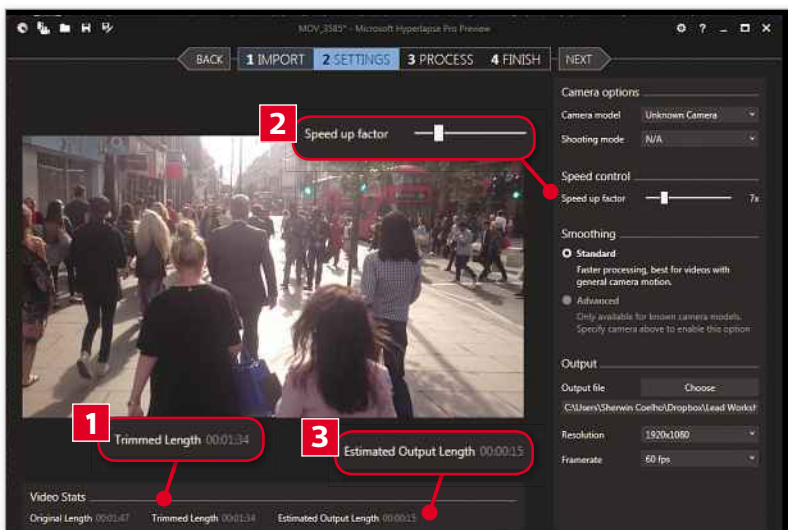


STEP 2 You'll now see your video in a preview screen. By default all videos are imported in landscape mode. If your video was recorded in portrait mode, then click the Rotate icons **1**. You first need to trim your video by cropping its start and end points. There are two ways to do this. The first is to play the video (either by clicking the Play icon **2** or pressing the spacebar key). Now press the 'Set start' **3** and 'Set end' **4** buttons while the video is playing to determine those points.

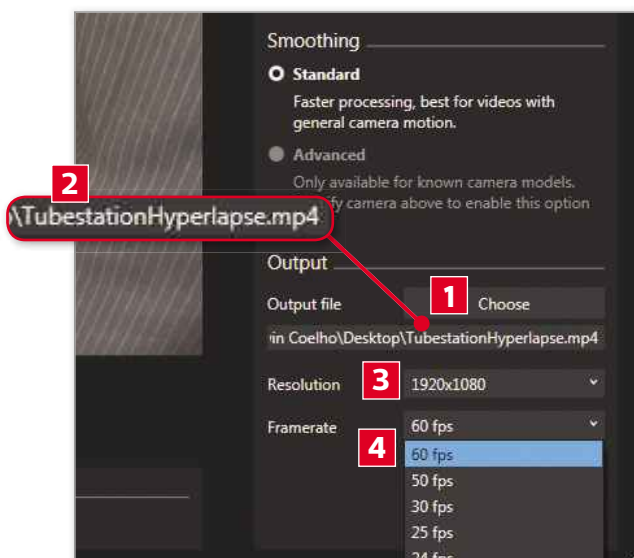
Workshops



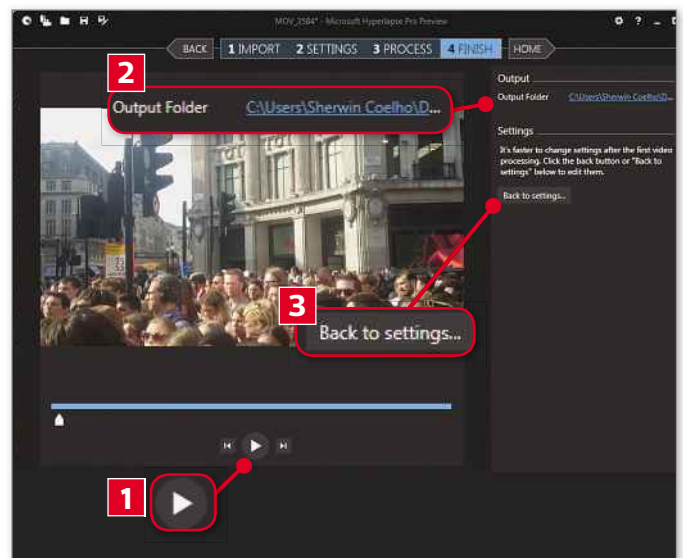
STEP 3 Alternatively, if you have an idea where you would like your video to start and end, then click and drag the start **1** and the end **2** sliders to those points. You can drag the Seek slider **3** along the timeline to move through the video. Click the 'Next frame' or 'Previous frame' icons **4** if you want to move frame by frame and navigate to a precise point. After you've set your start and end points, click Next at the top of the program.



STEP 4 You'll now see another preview screen with your trimmed video duration at the bottom **1**. The 'Speed up factor' slider **2** lets you control the length of your final timelapse video. As you move the slider, the Estimated Output Length **3** (your final timelapse video length) will change accordingly. Select how fast or slow you want your timelapse video to be by moving the slider.

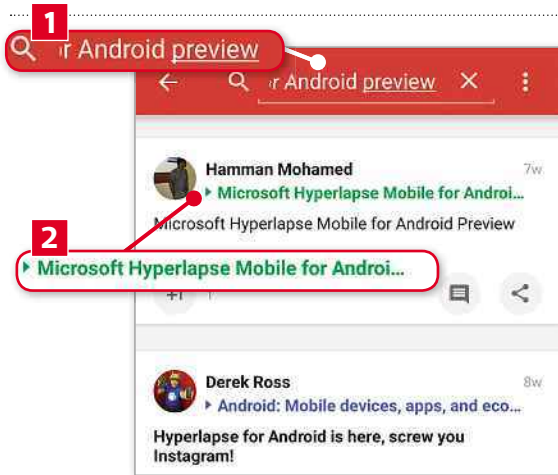


STEP 5 By default your timelapse video is saved to the same location as the video you uploaded. To change this, click Choose **1**, navigate to the folder you want to save it to, then click Save. To change the name of your timelapse video, click inside the field below 'Output file', then click the right-pointing arrow key and go to the end of the field. Now delete the default name between the '\' and '.mp4' and rename your video **2**. For the best output settings, set the Resolution to 1920x1080 **3** (a resolution of 1080p or Full HD) and the Framerate to '60 fps' **4** (60 frames per second). Click Next at the top when you're done.



STEP 6 Hyperlapse will now begin processing your video. This can take a while, depending on how long your video is, but you'll see a progress percentage slider in the middle of the screen. When this finishes, click the play icon **1** to watch your timelapse video in the preview window. You'll notice that any shaky or wobbly sections of the video have been smoothened. Click the Output Folder link **2** to open the folder on your PC from where you can play the video. If you're unhappy with your timelapse, click the 'Back to settings' button **3** to return to Step 4 and tweak your video.

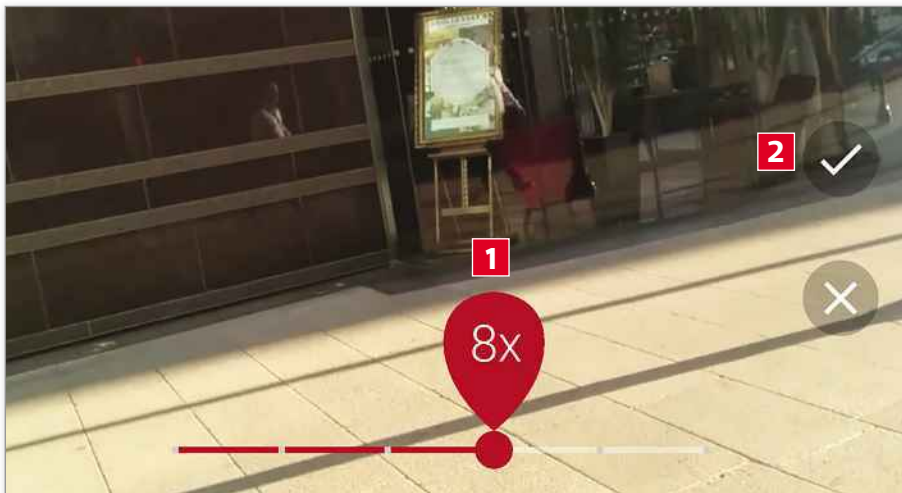
Make super-smooth timelapse videos



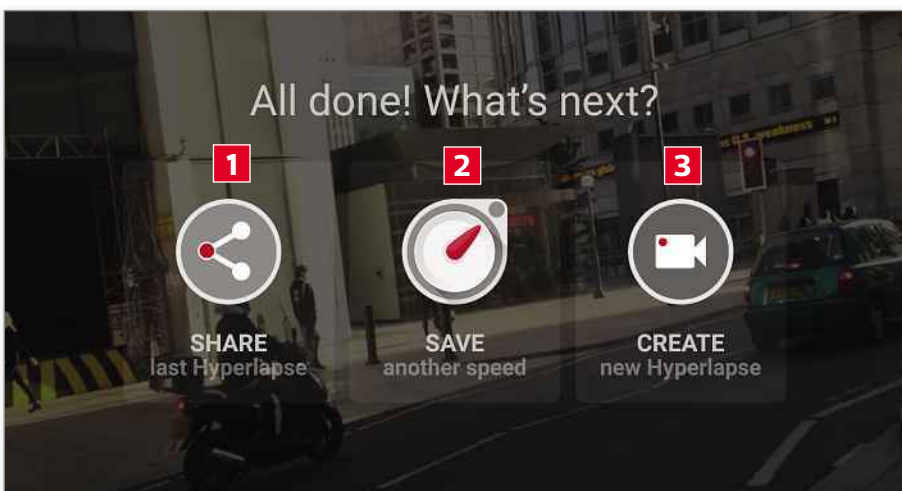
STEP 7 The Hyperlapse Pro Android app works in a similar way to its PC counterpart. Because it's still in **beta** you can't install it from the Play Store, so you first need to become an 'app tester' to get access to it. To do this, open the red Google+ app on your device, tap Home at the top to reveal the search bar, then type **microsoft hyperlapse mobile for android preview** **1** and tap Enter. Now scroll down until you see a green 'Microsoft Hyperlapse Mobile for Android Preview' link. Tap it **2** to go to the app's Google+ community, then tap the red 'Join community' button.



STEP 8 You'll now see a link to tap in order to become an 'app tester'. Tap it, select Chrome (to open the link in your browser), then tap the blue Become A Tester button. You'll see a message saying 'You are a tester'. Now scroll down and tap the 'download it from the Play Store' link to go there. Next, tap Install, then Accept to install the app on your device, then tap Open. The app launches in landscape mode with two options: 'Import existing video' **1** and 'Record new video' **2**. Tap the former. Now tap to select the video you want to import from your device.



STEP 9 Trim your video by tapping and moving the start and end sliders on the timeline. Next, tap the tick icon to import your trimmed video. The process may take a while (up to a few minutes), depending on how long your video is. After that's done, your video will automatically start playing as a timelapse in 4x (meaning four times faster than the original). Move the slider to the left to slow it down or right to speed it up. There are five different speeds you can tap to select: 2x, 4x, 8x **1**, 16x and 32x. When you're happy with the output, tap the tick icon **2**.



STEP 10 Your timelapse video will now save to your device. Finally, you'll see a screen with three options. Tap 'Share last Hyperlapse' **1** to share your timelapse video using other compatible apps, including your email and cloud-storage apps and Google Photos. Tap 'Save another speed' **2** if you want to save the same video at a different timelapse speed. 'Create new Hyperlapse' **3** lets you create a new timelapse video. ●

Create system restore points automatically

What you need: Z-Cron; Windows XP, Vista, 7, 8 or 8.1

Time required: 25 minutes

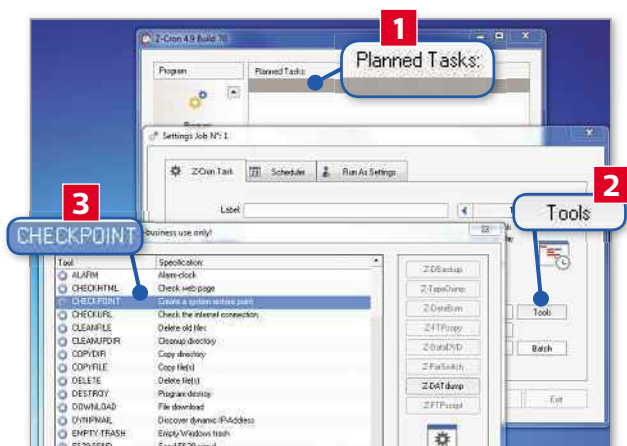
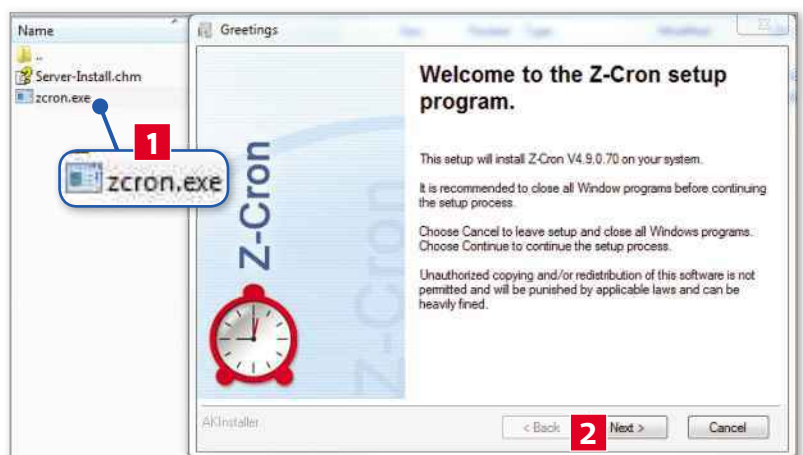
Windows has a built-in Task Scheduler that lets you create automatic **system restore points**, but the tool can be complicated and long-winded to use. Z-Cron is a free program that simplifies this process – we'll explain

how in this Workshop.

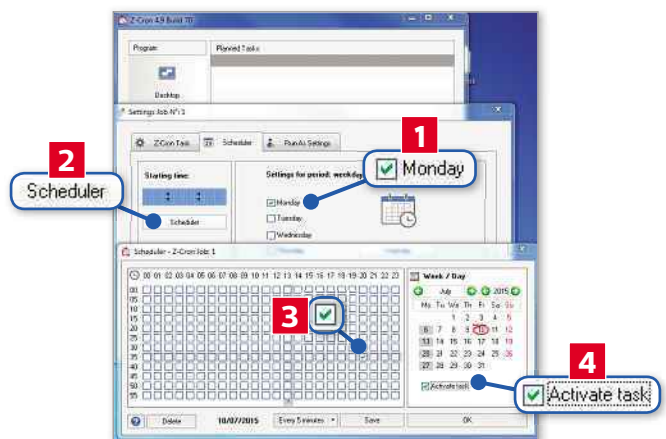
It also offers many more options for setting the regularity at which you want tasks to run. We'll show you how to use it to run CCleaner and empty your Recycle Bin regularly.



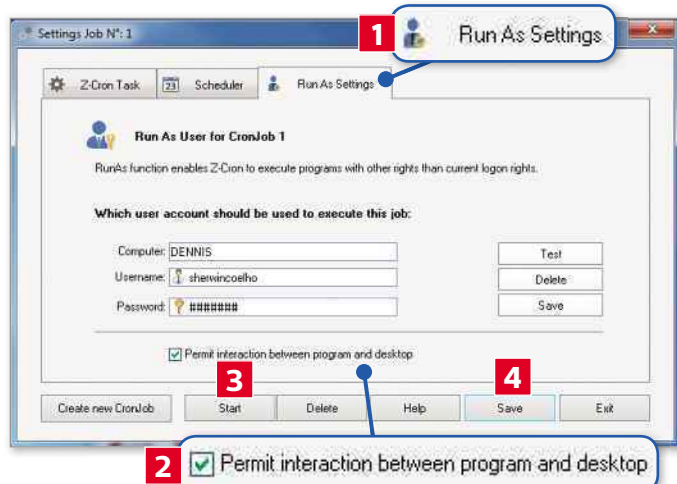
STEP 1 To download Z-Cron, go to www.snipca.com/17265 and click the first 'zcron.zip' link in the 'Z-Cron Freeware Version – Task and Backup Scheduler' section. Click the downloaded zipped folder, then click the setup file **1**. Now click OK (to set your language), then keep clicking Next **2** (five times) to install the program. If you see an error message, click 'Reinstall using compatibility settings', then Yes (this installs the program safely). Click Finish, then OK to exit setup and launch the program. You'll see a small window with a list of options on the left and a 'Planned Tasks' section on the right.



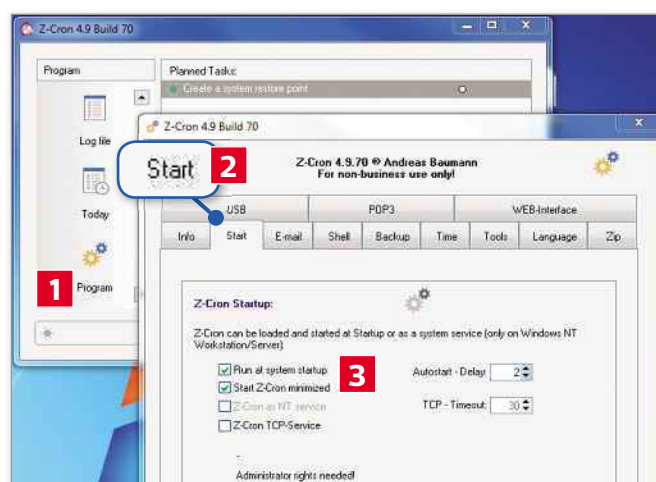
STEP 2 To create your first task, double-click the first line below Planned Tasks **1**. You'll see a new Settings Job 1 window with three tabs at the top. The first tab (Z-Cron Task) lets you set an automatic task, the second (Scheduler) lets you schedule it to run at a particular day and time, and the third tab (Run As Settings) lets you run the task as an Administrator. To create automatic system restore points, click the Tools button **2**, select CHECKPOINT **3**, then click OK at the bottom right. The Label, Description and Command fields in the Z-Cron Task tab will be automatically filled.



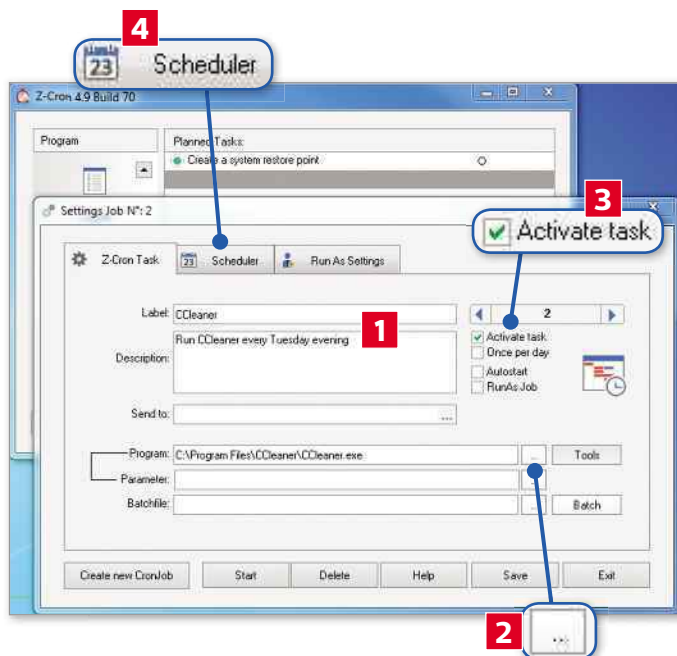
STEP 3 Now click the Scheduler tab. It's a good idea to create system restore points weekly so tick the day you want (we selected Monday **1**). You now need to set a time for the creation of your system restore point on that day. To do that, click the Scheduler button **2**. You'll see a large window with multiple boxes, which each represent different times of the day (in five-minute intervals). Hours are listed across the top and minutes down the left. Tick a box **3** to set a time when your PC is likely to be on, tick 'Activate task' **4**, click OK at the bottom right, then Yes.



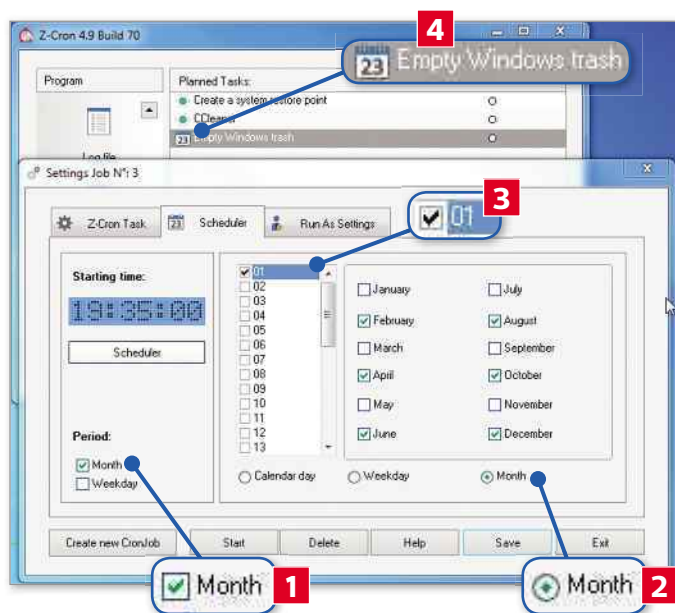
STEP 4 Next, click the Run As Settings tab **1**. Enter your PC's username and password in the fields provided, tick the 'Permit interaction between program and desktop' box **2**, click Start **3**, Yes, OK, then click Save **4** and OK. You'll now see a new 'Create a system restore point' option in the Planned Tasks section of the main program. If you want to reschedule this task, then right-click the option and click Scheduler to see the time-interval boxes. Untick the time you selected previously, tick the box representing the time you want, then click Save at the bottom.



STEP 5 From now, as long as your PC is on and Z-Cron is running, an automatic system restore point will be created on the day and time you set. It's a good idea to set Z-Cron to run at startup (in a minimised state) so you don't need to launch the program manually (it uses very few resources, so it won't slow down your PC). To do that, scroll down the left column, then click Program **1**. Now click the Start tab **2**, tick 'Run at system startup' and 'Start Z-Cron minimized' **3**, then click the Save button at the bottom.



STEP 6 We'll now show you how to set Z-Cron to run CCleaner once a week. Double-click the second line in the Planned Tasks section. Now type a Label and a Description **1**. Next, click the three dots beside Program **2**, navigate to the Program Files folder (in your C Drive), open the CCleaner folder, click the setup file, then click Open. Now tick 'Activate task' **3**, then click the Scheduler tab **4** and repeat the process described in Step 3 - tick the day you want to run the program, click the Scheduler button, set a time in the boxes in the window, click OK, Yes, then click the Save button below.



STEP 7 Finally, we'll show you how to set Z-Cron to empty your Recycle Bin on a set date and time every other month. Doing this will automatically delete unwanted files and reclaim storage space on your PC. Double-click the third line in the Planned Tasks section, tick 'Activate task' on the right, click the Tools button, select EMPTY-TRASH, then click OK at the bottom right. Now click the Scheduler tab, tick Month **1**, then select Month **2** and tick every second month. Next, tick the date you want to run the task **3**. Now click the Scheduler button, tick a time on that date that your PC is likely to be switched, then click Save at the bottom, then OK. You'll now see a small calendar **4** showing the number of days until this task runs. ●

Create a digital scrapbook of your life

What you need: Any web browser **Time required:** 45 minutes

Lifetile is a brilliant free web service that lets you create a digital scrapbook by adding significant events from your life to a timeline. You can write information and add locations, photos, videos,

documents and PDFs, then choose which ones you want to keep private, make public or share with others. There's even an option to bequeath access of your account to loved ones after you pass away.



STEP 1 Go to www.lifetile.me. You first need to create a free account, so click Sign Up **1** at the top right. Now type your first name, surname, email address and a password **2**, then click Sign Up **3**. You'll now see a step-by-step tutorial, but we'll explain what to do, so click Close Tutorial, then Yes to confirm. To create your first post, click the green Add Item button halfway down the page on the right.

STEP 2 Now click Add Title at the top and name your post. You now need to select whether you want to keep this private, share it with friends or make it public **1**. We'll show you how to give others access to your shared posts later (Step 6). Add a date for your post using the dropdown menus **2**, then type a description in the Information field. Tags are one- or two-word entries that help you group posts of a similar subject, making them easier to find later. Type relevant tags for your post. Click the '+' icon **3** to add more.

STEP 3 Now enter a location for the post by clicking 'Enter a location' and typing your postcode/city. As you start typing, you'll see a list of autosuggest options. Click the one you want. To add a photo or video, click the '+' icon below 'Add Photos or Videos' **1**, navigate to and select the file you want on your PC, then click Open. Repeat this to add more media files. Follow the same process in the Add Documents field below (you can add word documents, spreadsheets and PDF files). To remove files you mistakenly add, click the 'x' icon **2**, then Yes. Finally, click the green tick **3**.

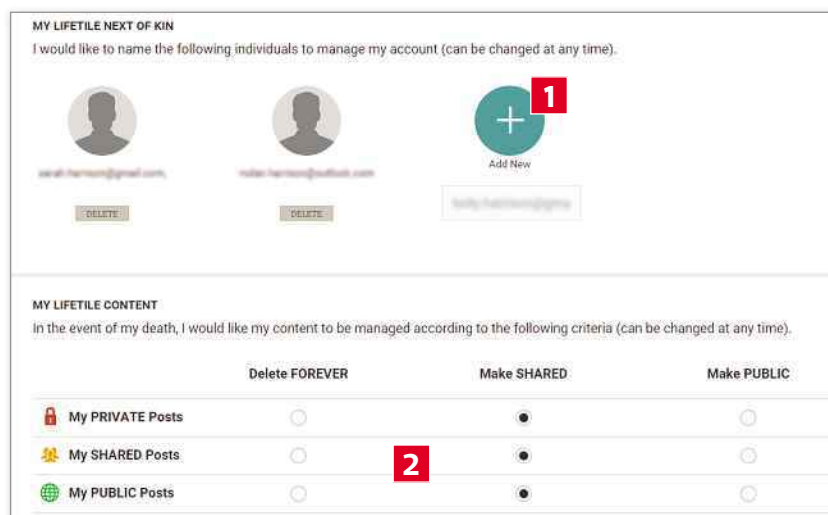
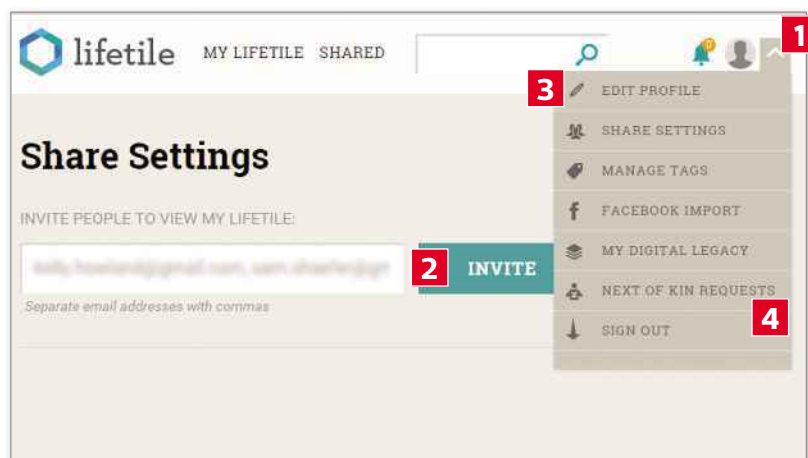


STEP 4 You'll now see the post added to a vertical timeline. Click it to open it in a new web page. You'll see your description at the top, along with the tags you added. Click the map **1** to open it (as a pop-up window) in Google Maps. Files you've added appear as thumbnails. Click any to open them as a pop-up window. If you've set the post's privacy to Public, you can send/share/email its URL. To edit your post, click the Add/Edit button **2**, make your changes, then click the green tick at the bottom. Click the Back button **3** to return to the timeline view.



STEP 5 Now click Add Item **1** and repeats Steps 1 to 3 to add a second post. Keep doing this to add as many posts as you want for each significant event in your life. After you've added a few, click the slider on the main screen **2** to zoom in and out of your posts on the timeline below. To filter your posts by privacy settings, time period or tags, click Filters **3**. Untick the posts' Privacy settings to hide them. To see all the posts dated between a time period, click the From and To dropdown menus and select the years. To only see posts with particular tags, click the Tags dropdown menu and untick the ones you don't want to see. Click Clear Filters **4** to do that.

STEP 6 To give people access to the posts you've made shareable, click the My Account dropdown menu **1**, then click Share Settings. Now type the email addresses of all the people you want to share those posts with in the text field, then click Invite **2**. Even though it's optional, it's a good idea to complete your Lifetile profile by clicking the My Account dropdown menu, then Edit Profile **3**. Here you'll see options to change your password, and to add a profile photo. If your family members or friends create an account, they can request you to be their next of kin, meaning their accounts will be passed on to you when they die (explained in Step 7). To accept these requests, click the My Account dropdown menu, then Next Of Kin Requests **4**.



STEP 7 To bequeath your account access to someone after you pass away, click the My Account dropdown menu, My Digital Legacy, then click the slider at the top. Now click the Add Email Address field and type the email address of the person you want to give access. To add more people, click Add New **1**. Scroll down to select what you want to do with posts of different privacy settings after you pass away. You can choose to permanently delete them, make them shareable or make them public **2**. When you're done, scroll to the bottom of the page and click Save Changes. Now enter your password, then click Save. The recipient(s) will receive an email with instructions. ●

Make free Skype calls in your browser

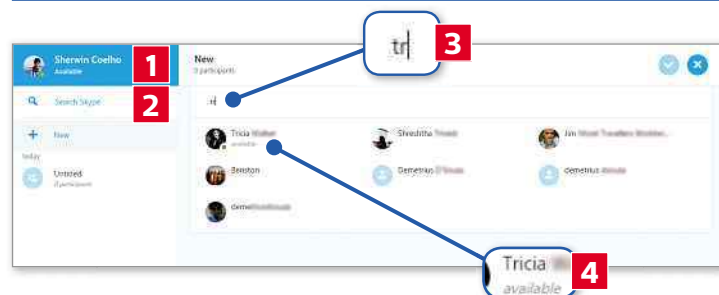
What you need: Any browser **Time required:** 10 minutes

Having named Skype the Best Free Program Ever (see Issue 434), we're delighted that its owner Microsoft has now launched an online version that can be used in any browser. This means you can make and receive Skype calls or

send text messages to a group from any PC without installing the program or the mobile app. At the moment, the service is only available in the US and UK, and is only available in **beta**, but it worked flawlessly in our tests.

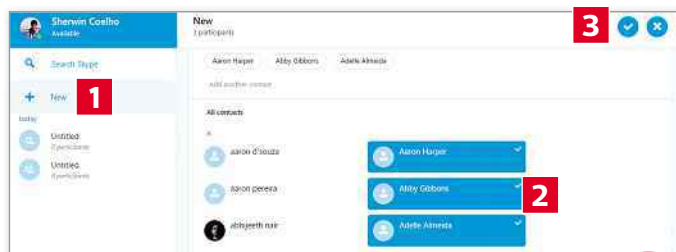


STEP 1 Go to www.skype.com and click the new 'Launch Skype for Web Beta' link in the middle of the page. Enter your Skype login details, then click 'Sign in'. To make video and audio calls you must install the Skype **plug-in**. We'll explain how to do this in Chrome, but the process is similar in other browsers. Click the Allow button at the top left. Now click the 'Get the plugin' link at the top, the green Add Extension button **1**, then Add **2**. Next, click the green Get Plugin button to download the file to your PC. Click the downloaded plugin, then Run.



STEP 2 You'll now see your profile at the top left **1**, a search bar **2** and a list of your Skype contacts (in alphabetical order) on the right. Scroll down to find a contact or type the person's name in the contacts' search field **3**. If the person is available **4**, click his/her profile to open a new chat screen. At the top right, you'll see a camera icon (for video calls), a telephone icon (for voice calls) and a small '+' symbol (to add more participants to the call). You can also send a message to the person by typing in the field at the bottom. Whenever you receive calls and text messages you'll see a notification at the bottom right of your screen.

STEP 3 To create a group, click New **1**, scroll down your contacts' list and click to select the people you want to include **2**. When you've finished, click the tick icon **3** to begin a group message chat. If members of your group are offline, they'll see the messages when they log in. By default, your Skype status is set to Available. To change it to Not Available, click your profile at the top left, then click the slider beside Available. Click the Account link if you want to change your account details, including your profile and password.



• Turn to page 70 for Fast Fixes for Skype

NEXT ISSUE

ON SALE
5 Aug

- Stop Windows 10 messing up your software
- Find out how other people use your PC
- Get phone alerts that are actually useful
- Control your PC without a mouse

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TIP OF THE FORTNIGHT

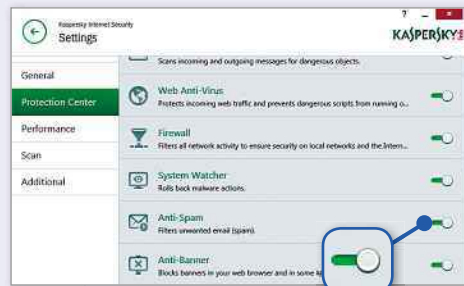
Tweak Kaspersky's settings for better protection

Last year I was inspired by your Workshop on Kaspersky Internet Security 2014 (Issue 419) to start using it as my antivirus. My one-year licence expired last week. Thankfully, the brilliant program is still available as a Reader Offer (page 68). So I have now bought Kaspersky Internet Security 2015, which comes with even better security features than its predecessor. However, upon delving deeper into the program I was surprised to find that a few vital settings are turned off by default.

To remedy this, open the program and click Settings at the bottom. Now click Protection Center at the top left, scroll down the list on the right, then click the Anti-Spam slider to turn it on (see screenshot). You can now choose what

to do with spam email you receive in your default email program. Click the Spam dropdown menu where you'll see options to skip, move, copy or delete spam. If you select move or copy, you should next click the three dots in the adjacent field and select the folder you want to move/copy spam to. Click Accept at the bottom when you've finished. Now click the slider beside Anti-Banner. This stops banners popping up in advert-supported free programs and on websites.

Now click Additional on the left, click 'Threats and Exclusions', then tick 'Detect other software that can be used by criminals to damage your computer or personal data'. If you have an old PC



(as I do), then untick the 'Enabled Advanced Disinfection technology' box at the bottom. While this eliminates malicious programs in an instant, it can be quite resource-heavy. Unticking the box will make your PC perform faster and get rid of malware when you next reboot.

Peter Gill



The winner of every Tip of the Fortnight wins this exclusive Computeractive mug!

WINDOWS XP

Disable startup programs using the Registry Editor

✓ My Windows XP PC takes about 15 minutes to start up. Being a regular *Computeractive* reader, I realise the multiple programs that launch at startup are to blame, but I can't access my System Configuration to disable them. Just when I'd given up hope, a friend told me of another way you can do the same task via the Registry Editor – it only works in XP apparently.

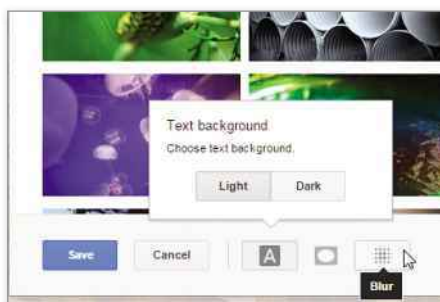
Open the Start menu, click Run, type **regedit**, then press Enter. Now navigate to the following folder by clicking the dropdown menus on the left: **HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run**. Here, you'll see a list of all the programs that start up with your PC. Right-click the ones you don't want opening, then click Delete. I removed a whole bunch of programs and my PC now starts up in about six minutes.

Ted Daly

EMAIL

Customise Gmail with new themes

✓ I appreciated Barry Lockhall's useful tip in your last issue about retrieving sent emails by activating



Google's 'Undo Send' feature. While turning that on, I stumbled upon a new Gmail feature that lets you add a theme to your account. I added themes when I used Yahoo Mail and always wondered why Gmail didn't offer the same option.

To add a theme, click the settings (cog) icon at the top right, then click the new Themes option. You'll now see a list of default themes that you can click to apply to Gmail.

I then saw three options at the bottom that let you customise your chosen theme. For example, if you want to see your inbox section as white text on a black background, click the Text Background option and select Dark (see screenshot above). Meanwhile, the Vignette and Blur options offer sliders that darken the corners and add a blur effect to the background image in your theme.

Larry Forbes

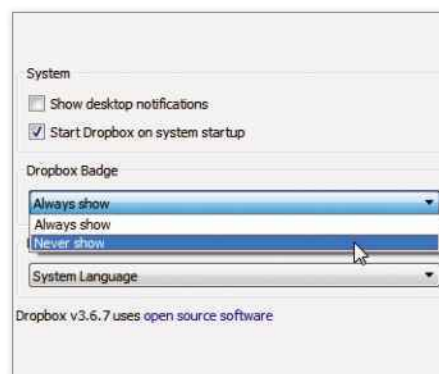
CLOUD STORAGE

Remove Dropbox's annoying floating icon

✓ I love Dropbox, but I've recently noticed an annoying blue floating Dropbox icon on my PC whenever I make changes to a file saved in my account. Right-clicking the icon gives you options to share a link to the file or view its history, but I have no intention of using these. There's no obvious way to remove or hide the icon, but thankfully my son found a way to do this.

Right-click the Dropbox icon on the right of your Taskbar, click the cog icon at the top right, then click Preferences. Now click the Dropbox Badge dropdown menu, select 'Never show' (see screenshot below), click Apply, then OK.

Brett de Vince



Phone and Tablet Tips

Brilliant things to do on your device

ANDROID

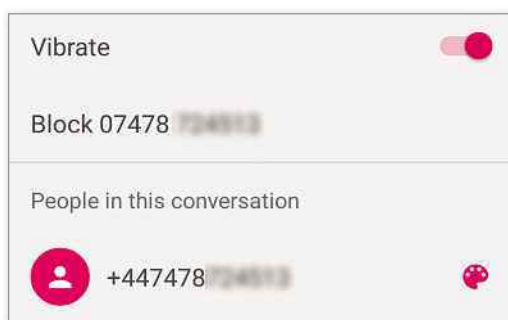
Block message notifications from nuisance numbers



Most of us have given our number to sign up for a product or service only to regret the decision when we're bombarded by spam texts. Thankfully, Google's free Messenger app lets you block message notifications from nuisance numbers. After blocking the number, all your existing messages from it will be moved to the Archived section within the app.

Install the free Messenger app (www.snipca.com/17229) and follow the onscreen instructions if you need to set it as your default messaging app. To block a number, navigate to any message you've received from it, tap the three dots at the top right, then People & Options. Now tap Block *number or contact's name* (see screenshot above), then OK. To access your archived messages, go to the main app screen (listing messages from all your contacts), tap the three dots at the top right, then Archived.

The app also lets you change the message colour for certain people. By default every message from each of your contacts appears as a random colour. To add a specific colour for a contact, first open any message they've sent you. Now tap the three dots at the top right, People & Options, then tap the small palette icon beside that



person's name at the bottom right. You'll now see a range of different circular colours you can tap and select.

ANDROID

Search for an item in Wikipedia without opening the app



The latest update to the Wikipedia app (www.snipca.com/17228) added a new feature that lets you search for the name of a person, place or movie in Wikipedia without opening the app. You can use this feature within any app on your device. Tap and hold the first word (of the longer term) that you want to search for. After the word has been selected, tap the sliders to select the entire term (full name of the person, place or film, for example).

Now tap the share icon (which should be at the top or bottom), then swipe through the list of options and tap Search Wikipedia. You'll see a list of related entries within the Wikipedia app. Tap the one you want to read.

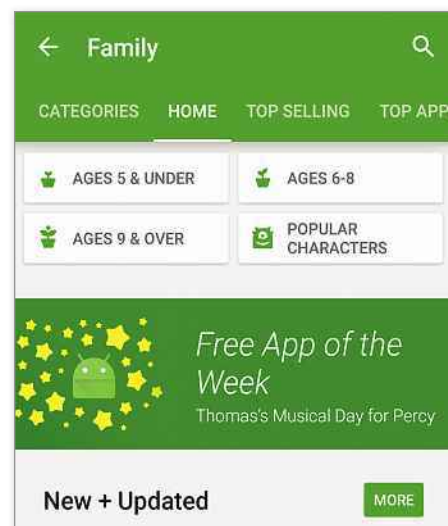
ANDROID & iOS

Get paid-for apps for free and find age-appropriate apps for kids



The Apple App Store has always had one paid-for app that you can install for free every week. It also contains a category for kids' apps (including games) divided into age groups. The latest update to Google's Play store app sees Android catch up with iOS. It now offers a free app every week and a category for kid's apps divided into ages.

In Android, open the Play store, tap Apps at the top left, then tap the new Family section at the top right. You'll see apps for age groups and a new 'Free App of the Week' banner (see screenshot



Best New Apps

What you should install this fortnight

Solid Explorer Free

Android: www.snipca.com/17230

Your phone or tablet gets sluggish when its storage is full. Solid Explorer helps



to solve this problem by telling you which items are taking up the most space. It then lets you move these to your cloud-storage accounts. This will free up space and make your device faster.

Dark Sky £2.99

iOS: www.snipca.com/17231

One of the best iOS weather apps just got better. You can now create custom weather



alerts to inform you when it will rain or when the weather will exceed 30 degrees, for example. Use the new daily summary to set a time to receive a weather forecast for the rest of the day.

Flick Free

Android and iOS: www.getflick.io

Windows Phone: www.snipca.com/17241

Flick (not to be confused with Flickr) lets you share contacts, photos, videos and notes between devices (including PCs)

connected to the same Wi-Fi network. First ensure the app/program is installed on all the devices. Now simply swipe upwards whatever you want to send from the transmitting device.



below). The 'Popular Characters' category has apps from the likes of *Peppa Pig*, LEGO, Disney and *Star Wars*. The free app is usually a children's app that normally costs between £1.99 and £4.99.

On an iOS device, open the App Store, then scroll down. The free app of that week is prominently displayed with a yellow 'Free' banner. This is usually a popular app from the App Store. To search for kids' apps, tap Categories at the top left, then tap Kids to see four age groups: 'All Kids', 'Kids 5 & Under', 'Kids 6-8' and 'Kids 9-11'.

iOS

Reopen web pages you've mistakenly closed



It's easy to open new tabs in Apple's Safari browser by tapping the '+' icon at the top right, then navigating to the website you want. However a lesser-known trick is that if you tap and hold the '+' icon you'll see a Recently Closed Tabs section which lists



all the web pages you've closed during your last browsing session (see screenshot above). Simply tap the web page you mistakenly closed to reopen it in a new tab.

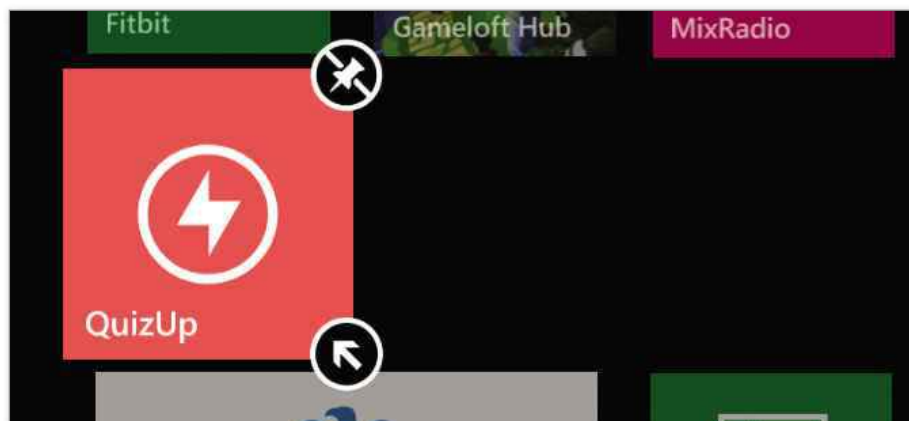
WINDOWS PHONE

Pin an app to the home screen



The Windows Phone home screen (which is called the 'start screen') consists of app tiles. However unlike Android and iOS, new apps you install from the Windows Store don't automatically appear on this screen. To add apps you install to the home screen, first swipe right from the home screen to see a list of all your apps arranged in alphabetical order.

Now navigate to, then tap and hold the app you want to add to your home screen



until you see the 'pin to start' option; then tap this. The app tile will now appear at the bottom of your home screen. To reposition it, simply tap and hold the tile until the other app tiles grey

out, then drag it wherever you want. Resize the tile by tapping the small arrow at its bottom right (see screenshot above) then choosing the small, wide or medium tile size. Tap the tile when you're done.

Games With Kids

What to play together on your phone and tablet

AGES 0-5

Fireman Sam – Fire and Rescue

£1.99 www.snipca.com/17232 (Android)

£1.99 www.snipca.com/17233 (iOS)

This app comprises five games in which your toddler needs to rescue people using simple swipe gestures. Our favourite game involves saving people from a building by dragging the fire engine to the right spot.



AGES 6-10

Thinkrolls

£2.29 www.snipca.com/17234 (Android)

£2.29 www.snipca.com/17235 (iOS)

In this physics-based game, you need to navigate your character through a maze by discovering how to manipulate obstacles in its path. For example, use rocks to break surfaces and ice blocks to douse fires. There are over 200 levels to complete.



AGES 11-16

Stick Tennis

Free www.snipca.com/17236 (Android)

Free www.snipca.com/17237 (iOS)

If you're suffering from a Wimbledon hangover, this is the perfect cure. As your player moves across the court, you simply need to swipe your racket at the right time to make your shot. Win Grand Slams to unlock and play as different players (including Andy Murray) and on different court surfaces.



Make Windows Better

Clever tips for every version

WINDOWS 7, 8, 8.1

See a notification whenever you switch caps



Some keyboards have small light indicators for the Caps Lock key. If you don't have one of these keyboards and tend to use that key a lot (to type your passwords in upper and lower case, for example), then you should install the free tool Keyboard Indicator. This displays a small icon on your Taskbar that tells you whether your Caps Lock is on or off.

To download it, go to www.snipca.com/17200 and click the 'Download Keyboard Indicator v1.6.0.1' link. Next, click the downloaded zipped file, open the folder inside, click the 'KeyboardIndicator.exe' setup file, then click Run. You'll now see a small blue or pink 'A' icon in your



Taskbar. If the icon is blue it means that Caps Lock is off. A pink icon denotes it's on. Whenever you press the Caps Lock key, you'll see a notification at the bottom right of your PC (see screenshot above) and the icon will change colour accordingly.

WINDOWS 8, 8.1

Use a four-digit PIN to log into your PC



Windows 8 and 8.1 let you use a picture password or a four-digit PIN instead of your regular password (comprising numbers and letters). To use a four-digit PIN, go to the Modern tile interface, click your profile icon at the top right, then click 'Change account picture'. Next, click 'Sign-in options' at the top left, then click the Add button below PIN. You first need to enter your current password and click OK. Now enter and confirm a four-digit number that you want to use, then click Finish.

WINDOWS 7, 8, 8.1

Stop your PC automatically rebooting



Every few weeks your PC automatically downloads important system updates in the background. You're then prompted to install them by restarting your PC. You can choose to delay the restart by selecting a time (from '10 minutes' to '4 hours') from the

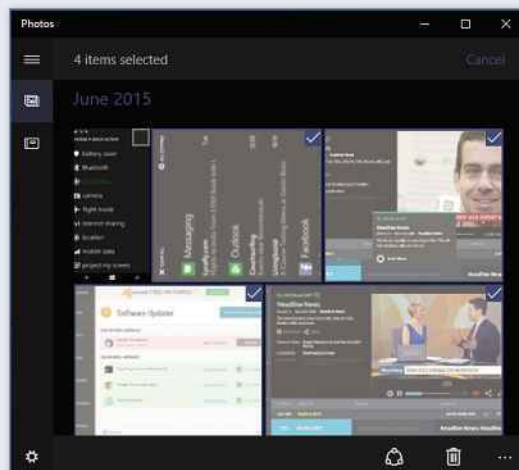
WINDOWS 10

Use Windows 10's updated Photos app



The latest version (Build) of the Windows 10 Technical Preview has an updated Photos app. See the lead Workshops in Issues 444 and 445 if you've yet to install the Windows 10 Technical Preview. To update to the latest Build (10162, at the time of writing), open the Start menu, click Settings, 'Update & security', then the 'Advanced options' link. Now select 'Automatic (recommended)' from the dropdown menu at the top, tick the box below ('Give me updates when...'), then scroll to the bottom and select Fast from the dropdown menu below. Next, click the top-left Back button, then click 'Check for updates' and wait until your PC updates and restarts. Your Build number is shown at the bottom right of the screen.

The Photos app consists of photos and videos you've saved to your PC (including screenshots) as well as media files saved to your OneDrive account. To sync your PC with OneDrive (which comes as a default app in Windows 10), type **onedrive** in the search box at the bottom, then click the first option, log into your account and follow the steps.

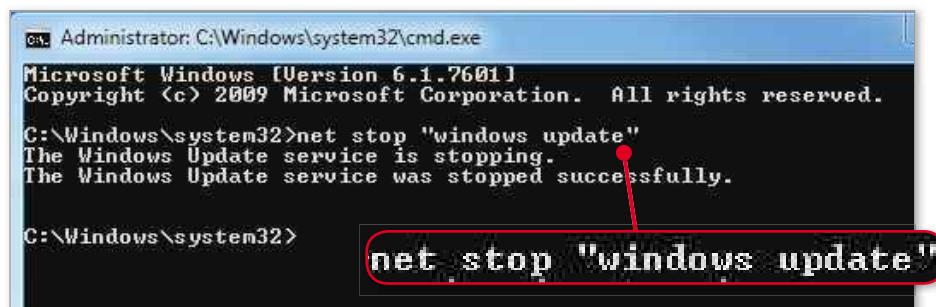


To open the updated Photos app, click the Start button, then click the Photos tile on the right section. You'll see your media files as large thumbnails arranged by date. To hide duplicates, click the Settings (cog) icon at the bottom left, then click the slider beside 'When photos have online duplicates or digital negatives, show just one'. If you don't want to see your OneDrive photos within the app, then click the slider beside 'Show my photos and videos from OneDrive'. Now click Collection at the top left. To delete multiple items in one go, move your cursor to the ones you want to delete and click the boxes at their top right (see screenshot above). Next, click the Bin icon at the bottom right, then click Delete.

dropdown menu. After that time elapses, your PC will automatically reboot.

If you're working on something important and need to continue using your PC beyond four hours, then there's an easy way to bypass this automatic reboot using the Command Prompt. You first need to open it as an Administrator. To do that,

press the Windows key, type **cmd**, press Ctrl+Shift+Enter, then Yes (to confirm you want to open the Command Prompt as Admin). Now type the following command **net stop "windows update"**, into the Command Prompt (see screenshot below), then press Enter. For more Command Prompt tips turn to page 59.



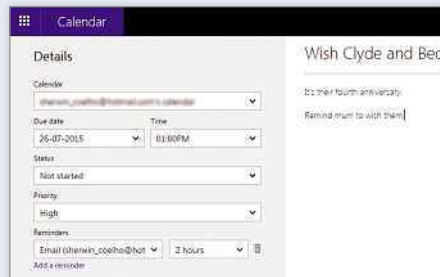
OUTLOOK.COM

Create email reminders in Outlook.com



It's easy to use Microsoft's powerful Calendar app to receive email reminders of important events in Outlook.com. To do this, first go to www.outlook.com and log in with your Microsoft (Outlook or Hotmail) account. Now click the icon with nine dots at the top left to see a selection of Microsoft Online apps, then click the purple Calendar tile.

To create a new event, click the New dropdown menu at the top left, then select Task (you can also click Event). Now click the 'Due date' dropdown menu and select the date of your event on the calendar. Next, click the Time dropdown menu (showing half-hour



slots) and set the time for the event. You can choose a Status ('Not started', 'In progress' or Done) and Priority (High, Low or Normal) by clicking the relevant dropdown menus.

To set the reminder, click the Reminders dropdown menu and set it to

your Outlook email address (it's set to 'Notifications on your devices' by default). Next, click the adjacent dropdown menu and set how long before the event starts you want to be notified about it. There are 16 options available, from 'At start time' to '2 weeks'. When you've finished, click the 'Add a task' field at the top and name it. Then enter more details in the 'Add a description' field below. Finally, click Save at the bottom.

You should also install the free Outlook apps (Android www.snipca.com/17182; iOS www.snipca.com/17183) so you can receive the email notifications on your phone and tablet.

EXCEL

Use Excel 2016's new chart categories



In Issue 450, we showed you how to install and use the new Office 2016 Preview (see the 'Try Office 2016 on your PC for free' Workshop, page 35). The latest update to Excel lets you add five new chart categories.

First, open the Excel 2016 Preview on your PC. You'll see a Microsoft Activation Wizard. Click Next twice, then Upgrade to update the program to the latest version. After the update has completed, click 'Black workbook' and type the data into your spreadsheet. Now highlight the data you want represented in a chart, click the Insert tab, then click

Recommended Charts in the Charts section at the top.

Next, click the All Charts tab. At the bottom left you'll see five new types of chart – Treemap, Sunburst, Histogram (see screenshot below), Box & Whisker and Waterfall. Click any of the chart categories to preview how your data would be represented and double-click the chart you want to add to your spreadsheet.

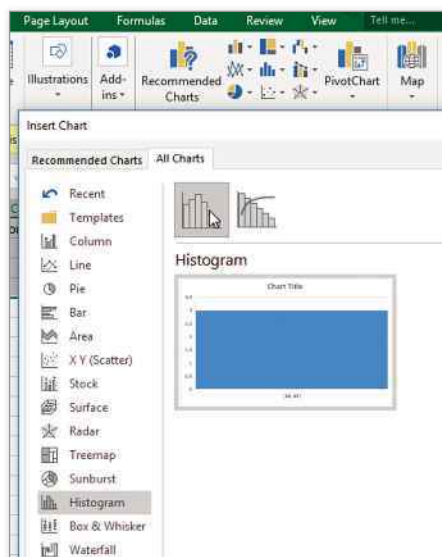
OFFICE

Make files and folders you access often easier to find



By default, the 2010 versions of Word, Excel and PowerPoint keep a record of all the items you open and which folders they are located in. To access this list, click the File tab at the top left, then click Recent. You'll see two columns – files on the left, folders on the right and pin icons beside every item. If there are particular files or folders you work on regularly, click their pin icons to move them to the top of the list, making them easier to find.

By default, Office 2013 and 2016 open with a list of recently accessed files on the left. To pin a file you use often, move your cursor to it, then click the pin icon to its right. It will now appear in a new Pinned section at the top.



POWERPOINT

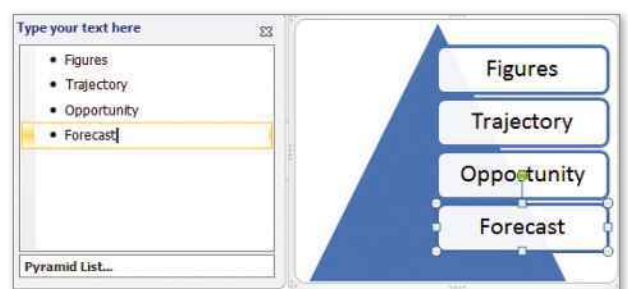
Give lists a more dynamic look



Lists in PowerPoint presentations can look dull, but it's easy to convert them into livelier text-based graphics.

To create a list, click the Home tab, then one of the list-type options (bulleted or numbered) in the Paragraph section, then type your list. Next, select the list, then press Ctrl+X to cut and paste it to your clipboard.

Now click the Insert tab, then SmartArt (in the Illustrations section). You'll see a variety of graphics, mostly with cell or column designs. Click the categories on the left then the styles in the middle to browse your options. Select the graphic that best suits your list, then click OK to add it to your presentation. Now click the small arrow icons to the left of the graphic to open a text-box field. Click inside this field, press Ctrl+A, then Ctrl+V to paste your list. The text will appear in the field as well as within the graphic's cells or columns (see screenshot). Finally, close the text field.





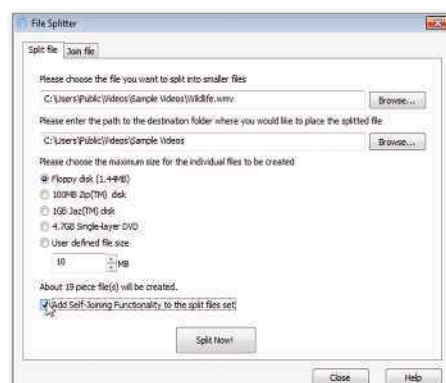
Glary Utilities

Customise your right-click menus, split massive files and get daily PC tips for free

Split big files

Glary's File Splitter tool lets you get around size limits on attachments imposed by internet service providers, freeing you up to email files of any size.

In File Splitter's 'Split file' tab, use the first Browse button to select the original file, then the second Browse button to choose a destination for the split files. Now select the 'User defined file size' button, then type your (or your



Split any large file to beat the attachment-size limits of internet service providers

recipient's) attachment limit in the box below – 10MB is a typical limit. Tick 'Add Self-Joining Functionality to the split files set', then click Split Now.

You can now send each of the resulting files as an attachment on individual emails. When all pieces have been received, your recipient needs to double-click the EXE file to have the original large file automatically reconstructed.

Add or remove right-click options

Glary adds several shortcuts to Windows' right-click ('context') menus. This is handy, but you might not need all these options – or you might want different ones. To customise what's displayed when you right-click, click Menu followed by Settings and then Context Menu. Now tick or untick the various items, then click OK to save.

Save your startup setup

Glary's Startup Manager has an option for saving the current configuration as a text file, so you can compare future setups –



Customise the options Glary adds to your Windows right-click menu

useful for troubleshooting.

Click File followed by Export, type a name for the file and then click Save. The saved file can be opened in a text editor.

When Windows startup gets bumpy, export a second file with a different name and then compare the two to see what's changed. You can then use Startup Manager to disable troublesome items by setting their Status switches to Disabled.

Switch your skins

You can spruce up Glary's interface with a new skin, or by creating one of your own. Click the little T-shirt icon at the top right of the program window, then switch between the thumbnail or palette tabs to apply a new image or colour cast. Alternatively, click Custom, then navigate to a photo of your own, select it and click Open. Move the slider at the bottom of the box to change the opacity of the main Glary interface.

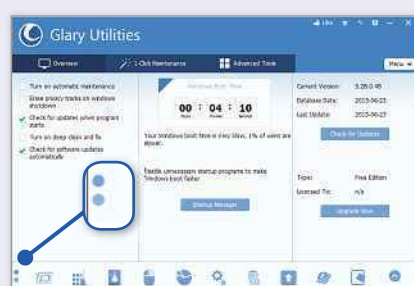
Make Glary Utilities portable

Glary can turn itself into a portable program. Click Menu followed by Portable Version, then click the large red Generate button. Now click 'Open file location', right-click the highlighted file ('Glary Utilities_Portable.zip') and choose Extract All. Note the folder name and location, then click Extract. Copy this folder on to your USB drive. To launch the program, double-click the portable program file ('Integrator_Portable.exe').

Discover Glary's hidden PC tips

The latest version of Glary Utilities (version 5.28) has a design that reminds us of Windows 8.1's Modern interface, with a flatter graphical look and feel, so you might not have noticed the tiny blue dots at the left-hand side of the bottom toolbar (see screenshot). If you click the lower one of these, the toolbar will flip to display a selection of links to tips hosted on the Filepuma website (www.filepuma.com), hosted by Glary's publisher Glarysoft (www.glarysoft.com). Just click a link to open the tip in your web browser. These tip links are updated all the time, so check back now and then for the latest additions.

Also look for the similar pair of dots



to the right-hand side of the Advanced Tools tab in the main Glary window: these flit between category and list view, in much the same way as you can toggle the Control Panel interface in Windows. You'll probably find the latter a more efficient way to navigate Glary's many features.

Apple Music

The company that made billions with iTunes now wants you to pay to stream music

What is it?

Apple's new music-streaming service (www.apple.com/uk/music), which is a major rival to Spotify. On the surface they appear similar: for £9.99 a month they both let you listen to (online and offline) an unlimited selection of 30 million tracks. But Apple Music has a secret weapon called Beats 1 Radio.

What's that?

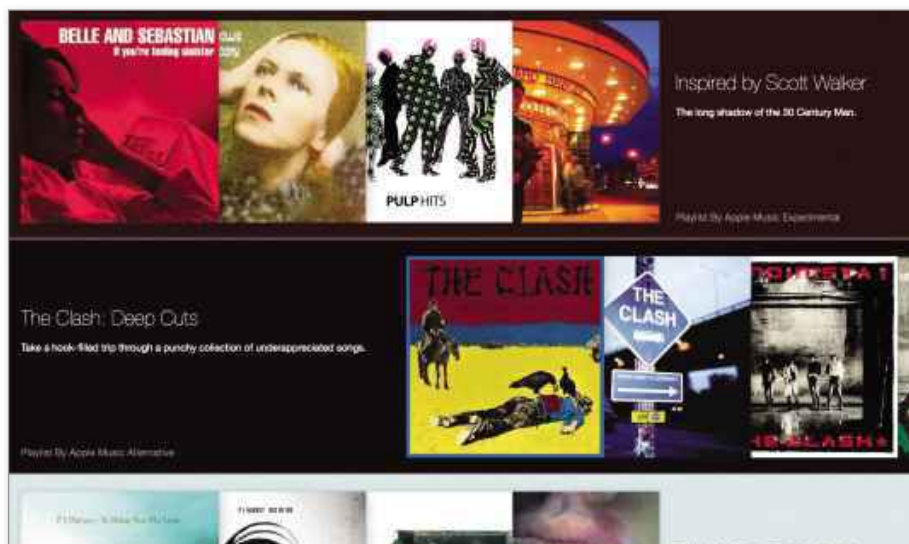
A 24-hour radio station broadcasting online from Los Angeles, New York and London. It features news, interviews and, crucially, songs picked by people Apple calls "music experts", including ex-Radio 1 DJ Zane Lowe. It will have more appeal than Spotify's radio stations, which are little more than personalised playlists of your favourite tracks. Plus, you don't need to pay the monthly fee to listen to it.

Will Terry Wogan be on it?

Sadly not, nor Ken Bruce, Jeremy Vine or *Gardeners' Question Time*. It's aimed at younger music fans who want to discover new music. We don't expect it to include an Apple equivalent of *Thought for the Day*.



Tap on the red bubbles to help Apple Music recommend other artists you may like



Does Apple Music offer different tracks to Spotify?

Yes, most notably those by 25-year-old megastar Taylor Swift, who last year removed her music from Spotify because she said it doesn't pay musicians enough. In June, amid much hype, she agreed to join Apple Music. Apple's 'cool' factor should attract other artists to offer exclusives, but there are some huge omissions, including The Beatles. The Fab Four (at least the surviving two) famously resisted the lure of iTunes for years, only agreeing to let their music be sold in 2010.

Music aside, the biggest difference between the two services is that Spotify has a free version, with adverts, while Apple offers only a free three-month trial. True, Spotify's free version doesn't let you select specific tracks to play, but millions of people tolerate this limitation rather than pay a tenner a month.

What happens to tracks I've bought through iTunes?

They are automatically added when you create an Apple Music account, letting you play bought and streamed music from one place. You can also add music you've ripped from CDs, and save tracks to play offline.

Do I need an Apple Mac to use it?

No, it's available for PCs as well. If you want to use Apple Music on a mobile device, you'll need an iPad or iPhone (it'll launch on Android this autumn). It was added to these devices as part of the iOS 8.4 update in late June.

Should I switch from Spotify?

Not if you love Spotify and don't own an iPad or iPhone. You can't instantly transfer your Spotify playlists to Apple Music, so you'd have to rebuild them track by track. But consider switching if you have no allegiance to Spotify, you have a large iTunes collection and you use iOS devices.

Is it any good?

The jury is out. For an Apple product it's uncharacteristically complicated, but it has some clever features to help you discover music based on your tastes. For example, tap the floating red buttons on your iPhone (see screenshot left) to tell it which artists you like and dislike. It won't change the world like Apple's gadgets have, but it's bound to be incredibly popular because millions of iPhone and iPad users will be trying it for free for the next three months. How many people will have abandoned Spotify by October?

Windows 10 Should You Upgrade?

Microsoft's new operating system is finally here – but is it right for you? Jonathan Parkyn has all the information you need to decide whether to upgrade

After months of waiting, fuelled by expectation, rumour and more than a little confusion, Windows 10 is finally here.

As you'll know by now, Microsoft's new operating system (OS) brings a number of

key improvements, but it will still feel familiar to all Windows users – which couldn't be said for its predecessor, Windows 8, which was dramatically different from Windows 7. Windows 10, by contrast, is essentially a streamlined version of Windows as we've known it for years. It's also safer, faster and, for a large number of people, completely free.

What's right for you?

But just because something's new, improved or free, that doesn't mean you should leap on board without carefully weighing up the consequences – especially when it's as central to your life as your PC's OS. If you're happy with your current system, there may be many good

reasons to stick with it. How can you be certain that the benefits of upgrading will outweigh the hassle? Will you stand to lose features, tools or files by upgrading? Will there be any hidden costs?

In most cases, your choice will be governed by two chief factors: the OS you're currently using, and whether Windows 10 provides you with what you need. Over the next few pages we're going to help make that decision as easy as possible for you by outlining all the major considerations. Whether you're using Windows 7, 8, 8.1, XP or Vista – or even Linux – this guide will arm you with everything you need to know to make an informed choice about whether or not Windows 10 is right for you.

WHAT YOU CAN DO

- Find out why Windows 10 may be your perfect OS
- Discover the Windows XP, 7 and 8 features you'll lose
- Get a Start menu that also works as a Start screen
- Upgrade from XP, Vista or even Linux
- Downgrade again if you want



WHICH VERSION OF WINDOWS ARE YOU RUNNING?

WINDOWS 7

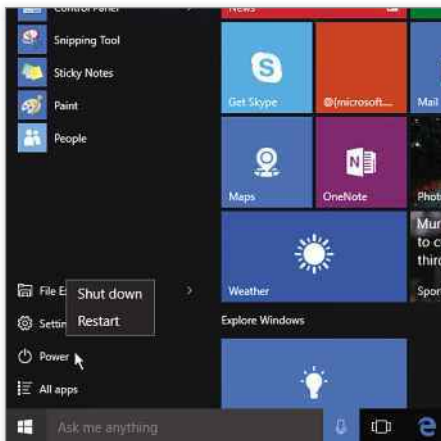
Many believe Windows 7 was when Microsoft last got it right. The OS is straightforward but packed with features, and it's currently installed on more than 60 per cent of the world's computers. But five years since Windows 7 launched, is it time to move on? Here's what we recommend, depending on your needs.

You love Windows 7 but wish it were faster

Windows 8 was just too different from Windows 7 for many. Its dramatically different Start screen and touchscreen-focused features felt like too much of a leap. And if you're still using Windows 7, chances are you made an active decision to give 8 a miss.

Windows 10 strips out a lot of things that made Windows 8 unappealing to many, including the full Start screen and the Charms Bar, and reinstates the Start menu and its embedded Power button. But it's not just a return to Windows 7, because Windows 10 greatly improves on that system's performance. The new OS is designed to run well on low-powered devices including tablets, so you're likely to notice a big speed boost if you install it on your Windows 7 PC.

However, there's a chance that older Windows 7 PCs could actually end up being *slower* after the upgrade. If you're using a computer that barely scrapes through Windows 10's system requirements (for example 16GB of free hard-drive space and a **DirectX 9** graphics card; see more at www.snipca.com/17142), you're better off sticking with Windows 7.



Windows 10's Start menu and Power button will feel familiar to Windows 7 users

You don't want to learn a whole new OS

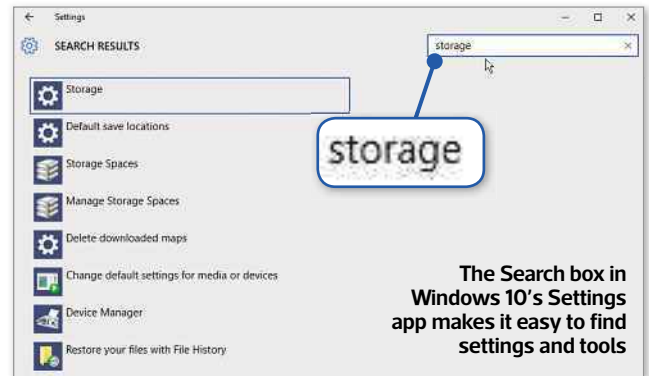
Windows 10 may reinstate many familiar features, but make no mistake – it's a completely new OS. That's something to bear in mind if you're nervous about having to re-learn how to use your PC.

For example, the Control Panel is quite different. Windows 8 didn't make many changes to the Control Panel; it just gave you more ways to access it via the more modern-looking Settings app. In Windows 10, many of the Control Panel's functions have been shifted over to Settings. Changes like this may well throw you at first – particularly if you're still getting to grips with Windows 7 or 8/8.1 after upgrading from XP.

What we would say, though, is that Windows 10's search feature works much better than before. Almost any tool or setting can be found easily by typing a keyword either in the Start menu or in the Settings app itself.

You love Windows Media Center

New versions of Windows bring lots of new features, but they also remove them, and one big feature many Windows 7



The Search box in Windows 10's Settings app makes it easy to find settings and tools

users may miss is Windows Media Center (WMC). It's built into Windows 7 (www.snipca.com/17201) and available to download for Windows 8/8.1 (www.snipca.com/17202), but it'll be uninstalled automatically if you upgrade to Windows 10, and you won't be able to get it back.

Windows Media Player (www.snipca.com/17203) is still there in Windows 10, though it has been reduced to **legacy status**. Instead, you are encouraged by default to use separate Music, 'Film & TV' and Photos apps.

If you've never used WMC, you're unlikely to mourn its loss. But if you've been relying on it to stream, record and organise your entertainment, you'll need to find a replacement. One of the best is the free program MediaPortal, which has just been updated (www.snipca.com/17141 see Best Free Software, page 18).

3 WINDOWS 7 FEATURES WE'LL MISS

Windows Media Center isn't the only casualty of the Windows 10 upgrade. Here are three more features you'll lose...

Classic games

Hearts and Minesweeper (see screenshot) have been a staple part of Windows for decades. They're not built into Windows 10, but you'll be able to download free versions from the Windows Store.

DVD playback

Windows 10 has no built-in support for playing DVD films. Instead, you can use MediaPortal (see above) or free program VLC (www.videolan.org).

Desktop Gadgets

Gadgets such as Desktop weather updates were ditched in Windows 8, after they



were found to contain security flaws (www.snipca.com/17204). The free replacement, 8GadgetPack (<http://8gadgetpack.net>), works in Windows 10 as well as 8/8.1.

WINDOWS 8/8.1

Windows 8 gets a lot of flak, and some of it is deserved. In retrospect, the enforced Start screen interface was a terrible mistake on Microsoft's behalf. The Windows 8.1 update was a big improvement, not least because it made the Start screen optional. In fact in some ways, it's possible to view Windows 10 as 'Windows 8.2' – a further refinement that builds on Windows 8.1's strengths while ironing out even more of its flaws.

You like Windows 8's speed and security

Windows 8/8.1 isn't all bad. Yes, it looks like an explosion in a tile factory, but there are lots of good bits too – and almost all of these have been carried across to Windows 10.

Improved file-transfer speeds, better searching, faster boot times and the ability to 'reset' your OS if you're having problems, without having to reinstall it or delete files – these are just a few of the great Windows 8 features that have made it into the new version of Windows.

Windows 10 also keeps Windows 8's built-in antivirus tool, Windows Defender. This keeps you safer than Microsoft Security Essentials (www.snipca.com/17210) – however, you can do even better by installing a third-party tool. Avast Free Antivirus (<https://www.avast.com>) is the best free antivirus according to the quarterly tests by our security team at Dennis Technology Labs, though the best product available is Kaspersky Internet Security, which you can buy for a special reader offer price of just £17.99 – see page 68. If you switch to one of these products, make sure to disable Windows Defender first to avoid a conflict.

You love your customised Start screen

The Windows 8/8.1 Start screen is easy to



You can use the Windows 10 Start menu full-screen – just like the Start screen

customise so all your favourite Windows apps are right where you need them. Windows 10 does away with the Start screen, so what happens to your customisations?

The good news is that Start screen tiles – including live tiles – survive in the new Windows 10 Start menu, but you will need to re-organise your tiles again, so it's worth making a note of your current set-up.

It's also possible to enable a full-screen Start menu in Windows 10: right-click the Desktop, select Personalise, then click or tap Start and switch on 'Use Start full screen'. This effectively reinstates the Start screen.

You upgraded to Windows 8 and hate it

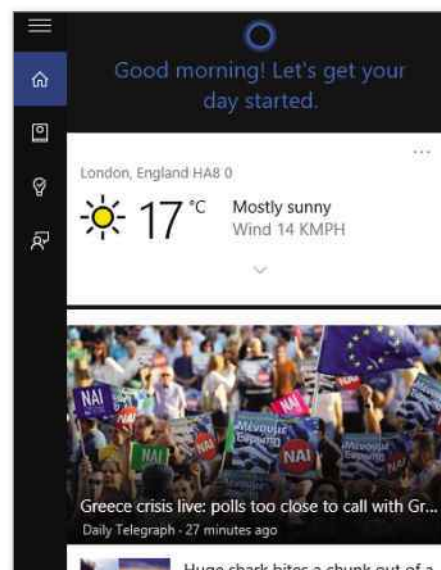
Did you find yourself forced into upgrading to Windows 8 when XP was killed off, or did you install it over Windows 7 and instantly regret your decision? If so, Windows 10 could be the antidote you need. It looks and works much more like earlier versions of Windows, but includes the best improvements of Windows 8 – along with some new benefits of its own, such as Cortana (www.snipca.com/17211), the voice-controlled personal assistant.

You don't trust Microsoft after Windows 8

If you were burned by the upgrade to Windows 8, even after updating it to 8.1, then we wouldn't blame you for being cautious about jumping into yet another OS. But it genuinely looks as if Microsoft has built a system that prioritises what users want. Besides, a year of public testing via Microsoft's Insider Program is likely to result in one of

the most stable, finely honed releases in the company's history.

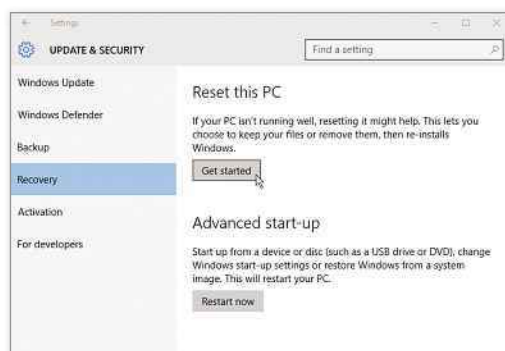
But, as any early adopter will tell you, jumping on board as soon as a new product is released can be a mixed blessing. You may experience problems downloading the software from Microsoft's busy servers, for example, or



Windows 10 has some great new features, including Cortana

there may be teething problems on Day One. You may wish to wait to see how well the new OS is received by others before taking the plunge yourself.

Microsoft has made it clear that users who are entitled to the free upgrade are under no obligation to actually carry out the Windows 10 installation until they are comfortable about doing so. That said, the offer only lasts for the first year of release, so you have until 28 July 2016 to make up your mind – after that you'll have to pay for Windows 10. How much? No one knows yet.



Windows 10 lets you reset your OS without deleting files, just like Windows 8



OTHER OPERATING SYSTEMS

Despite the fact that Microsoft killed off Windows XP last year by withdrawing all security support for it, the OS is still running on just under 12 per cent of the world's computers. If yours is among them, or if you're running Windows Vista or even Linux, should you make the leap to Windows 10?

You're running Windows XP or Vista

The first thing to consider is cost. Only users of Windows 7 and 8/8.1 get Windows 10 for free. If you're upgrading from Windows XP or Vista, or from a non-Windows OS, you'll need to pay Microsoft's currently suggested price of £99.99 – and that's before you've added any hardware upgrades to meet Windows 10's system requirements (www.snipca.com/17212).



Upgrading from XP will wipe out files and programs

Upgrading to Windows 10 from XP or Vista will also involve more hassle than upgrading from Windows 7 or 8/8.1, because you'll need to do a clean install. That means your files and programs will be wiped out, so you'll need to back up thoroughly first, then restore everything after the upgrade is complete.

On the other hand, with XP's lifecycle officially over, and Vista's due to end in April 2017, Windows 10 could be a good way to extend the life of your PC. It's a much more suitable replacement for your old OS than Windows 8.

You dumped Windows for Linux

Many former XP users turned their noses



If you switched to a Linux OS like Ubuntu, you'll need to pay for Windows 10

launch before buying a new PC, don't be surprised if you boot it up for the first time... only to discover it has Windows 8.1 installed on it instead!

up at Microsoft's preferred replacement, Windows 8, and switched to the free, **open-source** OS Linux instead. If you were one of them, you may be considering switching back, now that Windows 10 is here.

However, if you've acclimatised yourself to the world of Linux and installed a popular Linux Desktop platform such as Ubuntu (www.ubuntu.com, see screenshot above), there's little real incentive to return to Windows unless you're going to buy a new PC (which will, in most cases, come with Windows installed). There's Windows 10's likely £99.99 price tag to consider for starters. Then there's the hassle of backing up your data from your Linux system and restoring it once Windows has been installed. And, while Linux is designed to run on older hardware, Windows 10 may struggle to perform well on PCs that date from the early-XP era.

You're shopping for a new PC

If you've been waiting for Windows 10 to

10, Microsoft has changed the way that it releases software to PC manufacturers. It now prefers to carry on testing the OS right up until the last minute, which should result in a better final release. On the downside, it means that PC makers haven't been able to pre-install it on their new machines.

So if you buy a new PC over the next few months, you'll probably have to carry out the upgrade to Windows 10 yourself. Of course, you could always opt to stay with Windows 8.1, but our guess is you probably won't.



If you buy a new computer soon, it'll probably come with Windows 8.1, not Windows 10

HACK YOUR XP UPGRADE

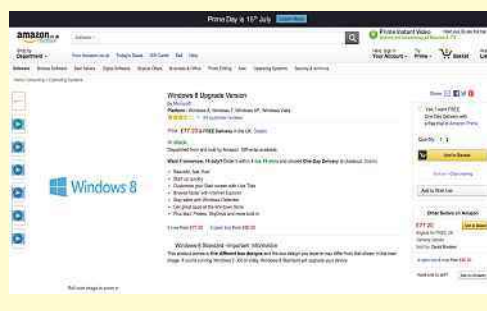
That £99.99 price tag hadn't *quite* been confirmed by Microsoft when we went to press, but it's unlikely to change much, if at all. So basically we're talking about 100 quid for a new OS on an old computer. Is it really worth it?

There are alternatives. The low-cost, high-hassle option is to buy and install

Windows 7 or 8, update it to Windows 7 SP1 or Windows 8.1 if necessary, then upgrade to Windows 10 for free. You'll need to make sure your XP or Vista PC has the specifications to endure all these upgrades. This could slash the cost of Windows 10 by nearly half; Amazon is currently selling Windows 8 for £77.20

(www.snipca.com/17267).

Alternatively, buy a Windows 7 or 8.1 PC and upgrade that to Windows 10 for free. You can get a new desktop PC for well under £500, and it's far more likely to have the hardware to support the new OS. We think this is far better than paying to install Windows 10 on a very old PC.



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WHAT KIND OF PC USER ARE YOU?

Your current OS is only one thing to take into consideration when deciding whether to upgrade. Your day-to-day computing needs and habits are just as big a factor in deciding whether Windows 10 is right for you. Here are a few common scenarios... which ones sound like you?

You have a PC, laptop, tablet and phone

If you use lots of devices instead of just your PC, you'll be very happy with Windows 10. Microsoft says the new system has an improved 'device unity' – which basically means that it'll work better across PCs, laptops, tablets and smartphones (here's the Microsoft blog again: www.snipca.com/17214).

This cross-device unity will only make a difference if all your devices are running Windows 10. For example, if you own a Windows 10 PC and a Windows Phone tablet and smartphone, you'll be able to use the same apps across every device. But if you're using an Android or iOS phone and tablet, Windows 10's device unity won't make an awful lot of practical difference.

You print and scan a lot

Just because your computer meets Windows 10's system requirements, that doesn't mean all your hardware will be compatible, too. Printer and scanner manufacturers, for example, are well known for neglecting older devices and failing to update **drivers** to provide compatibility for new versions of Windows. In some cases, a Windows 8.1 driver may also work in Windows 10, but there are no guarantees. If you have to factor in the cost of a new scanner or printer, then Windows 10 may suddenly seem a lot less enticing.

To check the compatibility of devices,



Use Microsoft's 'Get Windows 10' tool to check for compatibility problems before upgrading



Windows 10 works well across devices – but only if they're all running Windows

Windows 7 and 8.1 users should use the 'Get Windows 10' tool that recently appeared in the Desktop notification area. Make sure the relevant devices are plugged in and switched on. Next, click the Windows logo icon, then click the menu (three lines) button and click 'Check your PC'. You'll be warned of any potential compatibility problems with hardware and programs you have installed.

Users of earlier Windows versions should use the Windows 8 Upgrade Assistant (www.snipca.com/17189). If your device is shown to have compatibility problems with Windows 8, then it'll have problems with Windows 10 too.

Security is your top priority

Windows Defender makes Windows 10 safer than Windows 7 and its predecessors straight out of the box. But as we've mentioned, there are better third-party antivirus products than Defender.

What really makes Windows 10 safer than its predecessors is Microsoft's pledge to support the OS for the "lifetime" of your device. This should mean that your computer won't suddenly turn into a security minefield at some point in the future, as happened with XP.

There are other security advantages to the new OS. Windows 10's apps are a lot safer than traditional installable PC programs, since they're effectively **sandboxed** and can't affect your system files. Meanwhile, a new feature called Windows Hello (www.snipca.com/17216) could improve security further while reducing the

need to remember passwords. Instead of passwords, Hello logs you in using biometric identifiers such as fingerprints, iris recognition and even facial recognition. In most cases, you'll need additional hardware, such as a fingerprint scanner, to get Hello working.

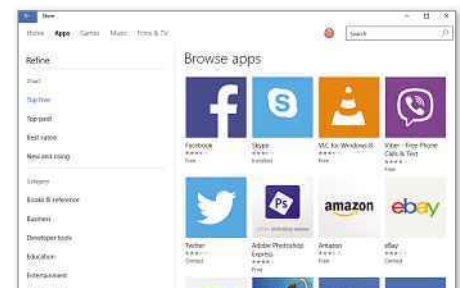


Windows Hello could soon see you logging in with your face

You love free software but hate installing it

Free programs are great, but installing them can be annoying because you so often have to dodge adware and **PUPs**. Even PUP-free programs can slow down your PC and be tricky to uninstall.

Windows apps, introduced in Windows 8 and also an integral part of Windows 10, don't share these disadvantages. They're easy to install – download them with one click from the Windows Store app that's built into the OS – and just as easy to



Apps are easier to install and safer than traditional programs, and many are free

remove again. They won't install adware or random toolbars, either.

The only catch is that not all the software on the Windows Store is free. As with the iTunes App Store and Google Play, the Windows Store is a mix of free and paid-for apps.

You want to continue using software you paid for

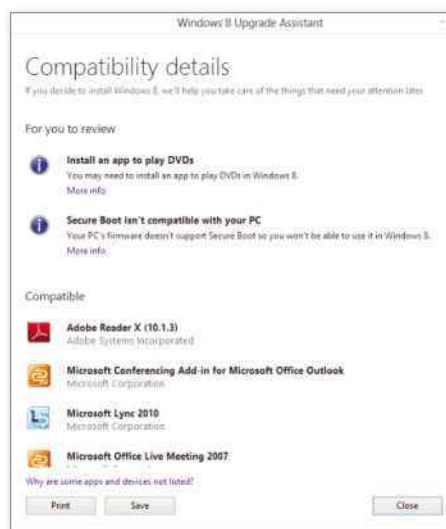
Windows 10 will let you install and run traditional third-party programs too, as long as they're compatible. Older software, in particular, may run into problems, and it's definitely worth checking to make sure your installed programs will work after you upgrade.

As with hardware, the 'Check your PC' tool or Windows 8 Upgrade Assistant will highlight compatibility problems (see screenshot below). And if you're planning to upgrade, there are easy ways to solve compatibility problems and continue using your favourite programs – they can be run in Compatibility Mode, for example. See our feature on page 57 of Issue 452 for more information.

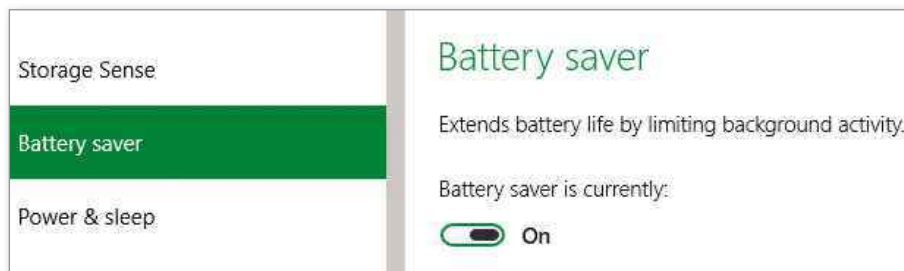
You mainly use a laptop

Windows 10 includes some bonuses for laptop users that may help sway your decision. One feature is Battery Saver, which automatically kicks in when power is low, limiting background activity in order to extend battery life. We've yet to test the final version of this, but it could be very useful.

In addition, the ability to switch between tablet and Desktop mode is a very handy addition for owners of laptops with touchscreens. And if you own a hybrid laptop-tablet device, the ability to automatically switch to or from tablet



Check for compatibility problems using the Windows 8 Upgrade Assistant



Laptop owners may appreciate Windows 10's new battery-saving abilities

mode whenever the keyboard is removed or attached is another big boon.

You love playing computer games

Not everyone is a gamer. But if you are, and you own an Xbox One console (www.xbox.com), then Windows 10 offers some very interesting advantages. With a Windows 10 computer and an Xbox One on the same network, you can use the Xbox app that comes with Windows 10 to browse and play Xbox One games on your PC. It works by streaming the game to the computer.

You can even play Xbox games on a tablet. For traditional PC gaming, Windows 10 includes DirectX 12 – an enhanced edition of Microsoft's graphics

platform – which will pave the way for games with ever-more realistic effects.

You hate constant updates

Windows Updates can be a pain. Sometimes it can seem like every time you log on to your PC you're faced with a barrage of updates, many of which require you to reboot.

Up until now, Windows users have been able to defer or choose not to install updates. But if you upgrade to Windows 10, updates will become compulsory – at least they will be if you use Windows 10 Home. Windows 10 Pro and Enterprise editions still get the option to defer them (see box below).

Added to this is the fact that Microsoft's vision of Windows as a service should mean more regular updates than with Windows 7 and 8/8.1. What we would say, though, is that, while they're annoying, updates are generally a good thing – they often make your PC safer and fix problems.



Windows 10 users can stream games from their Xbox One console

Think updates are a hassle? If you're using Windows 10 Home, they're compulsory too

WHICH EDITION IS RIGHT FOR YOU?

There are at least six editions of Windows 10 available. If you're only interested in upgrading for free, your choice is restricted to the equivalent edition of the version you're currently using.

So if you're using Windows 7 Home Premium or Home Basic, or Windows 8/8.1 standard edition, for example,



you can upgrade to Windows 10 Home for free (see screenshot). If you're on a Pro version of Windows 7 or 8/8.1, then you can upgrade to Windows 10 Pro for free. This may sound a bit limiting but, in

truth, there are few – if any – compelling reasons for the average user to consider anything other than the Windows 10 Home.



WHAT IF YOU DON'T WANT WINDOWS 10?

Stop Microsoft nagging you about Windows 10

If you've resolved not to upgrade to Windows 10, it's pretty easy to stick with the OS you've got: just don't install Windows 10. Microsoft will keep nagging you to upgrade, though.

We recently showed you how to get rid of the 'reserve your copy' notification by uninstalling its Windows Update file (file KB3035583; see Make Windows Better, Issue 452). To prevent the update from being re-downloaded, you'll need to switch from automatic to manual updates. Open Windows Update and click 'Change settings' on the left. From the dropdown menu, select 'Download

We don't think that's likely, as Windows 10 doesn't try to rewrite the way you use your PC, like Windows 8 did. That said, if you do decide you don't like Windows 10, then there are ways of rolling back your PC to its original pre-upgrade state, complete with your old version of Windows.

If you're upgrading from Windows 7 or 8.1, the installation process will, by default, automatically save a copy of your PC in its current state (assuming you have enough free hard-drive space). If you really don't like

Windows 10, then you can restore your PC to its former self by clicking Start, then Settings, then 'Update & security'.

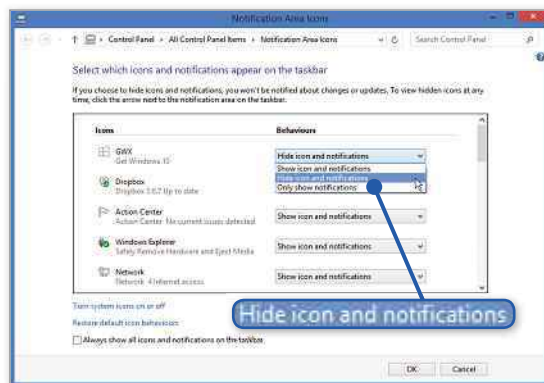
Select Recovery on the left, then click 'Go back to a previous version of Windows'. For some reason, however, Microsoft has imposed a 30-day limit on this roll-back feature. Theoretically, this means that if you decide you don't like Windows 10 after 30 days from when you installed it, then too bad – you're stuck with it. And if you're upgrading from Windows

XP or Vista you won't get the option to roll back at all.

Create a system image just in case

There's a way around these annoying limitations, and that's by making your own system image backup prior to upgrading to Windows 10.

In our series of features on getting your



Hide the notification icon if you don't want to see Microsoft's Windows 10 pop-ups

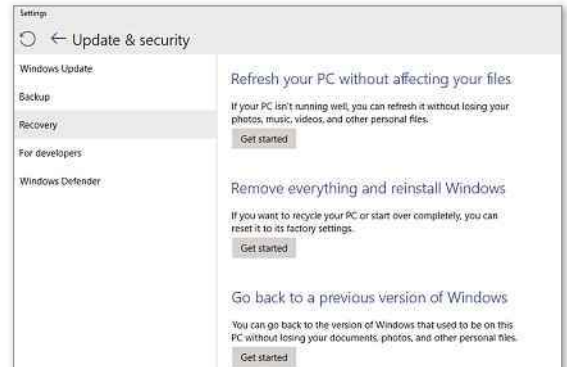
updates but let me choose whether to install them' and click OK. Restart your PC and open Windows Update again. Click 'Check for updates' and you'll see KB3035583 has popped up again. Right-click it and select 'Hide update' to prevent reinstalling it again.

Alternatively, hide the notification icon. Right-click the clock at the bottom-right of your Desktop and select 'Customise notification icons'. From the dropdown menu next to GWX (Get Windows 10), select 'Hide icon and notifications' then click OK.

If you accepted the offer to reserve your copy and you've since changed your mind, you can cancel your reservation. Click the Windows 10 icon in your system tray, click the menu icon in the window that opens and select 'View confirmation', then click 'Cancel reservation' and follow the remaining steps.

How to get your old OS back

What happens if you decide to upgrade, only to find that you hate Windows 10?



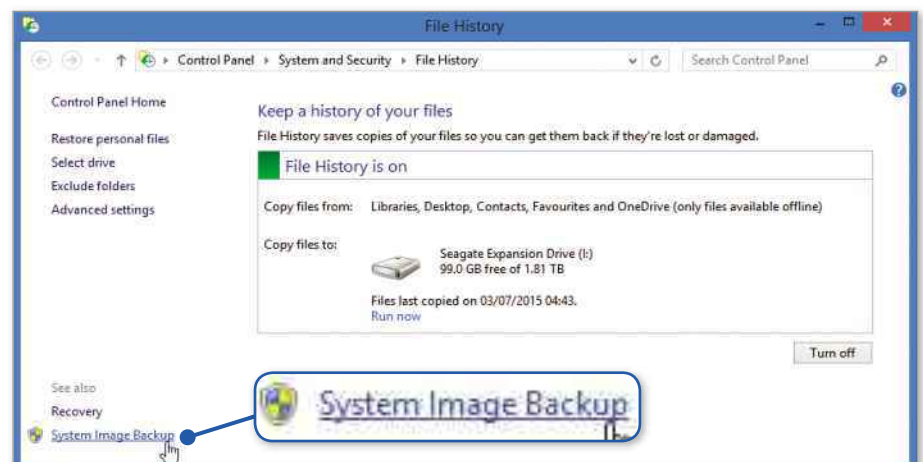
Windows 10 includes a built-in tool for rolling back to Windows 7 or 8.1 within 30 days

PC ready for Windows 10 (Issues 451 to 453), we recommended making a system image – an exact copy of your hard drive. That way, you can roll back your PC any time you like.

Windows 7 and 8/8.1 users can make one by typing **backup** into Start and clicking 'Backup and Restore' (Windows 7) or 'Save copies of your files with File History' (Windows 8/8.1). Attach a large external hard drive to your PC (one with enough room to store a copy of your system drive), then click 'Create a system image' (Windows 7) or 'System Image Backup' (Windows 8/8.1) and follow the on-screen steps to complete the process.

You'll also need to create a system repair disc, which you'll use to boot your PC from in the event that you need to restore the image backup and roll back your PC.

Windows XP and Vista users will need to use a third-party backup too, such as EaseUS Todo Backup Free (www.snipca.com/16844). Refer back to Issue 453 for more on backing up your PC before upgrading to Windows 10.



A system image backup ensures you can roll back any time



SO... WILL YOU UPGRADE TO WINDOWS 10?

WHAT YOU SAY

Over the past couple of months we've used our Facebook page (www.facebook.com/computeractive) to find out what excites and worries you about Windows 10. Your responses have broadly been in favour, but there's a healthy dash of wariness – you're a wise bunch. Here's a selection of your replies on the subject.

Will you download Windows 10 straight away?

"It's been tested thoroughly by now, but I'll wait a few weeks to be extra sure."

Anthony J Arnold

"I'm not going to rush. I worry it'll cause more expense – I had to replace my printer when I moved from XP to 7."

Wendy Sayer

"Not having it! My train simulator software won't work on Windows 10, so I'm retaining Windows 7 until 2020."

Paul Squires

"Yes, yes, yes. Straight away!"

Nicolás Hayman

On a scale of 1 to 10, how excited are you?

"Five. I've been using the Insider Preview and it's quite resource-hungry."

John Wright

"I would give it a 9, but Microsoft doesn't acknowledge that number."

Dan Worthington

What would you ask Microsoft about Windows 10?

"Why no DVD playback?"

Andrew Atterwill

"Will you bring back Hearts?"

John Laverock

WHAT WE SAY

Jonathan Parkyn, feature writer

While I love the latest technology, it's always good to treat a new launch with a healthy dose of caution. When Windows 8 was released, I stuck with Windows 7 on my main PC because Windows 8 didn't feel like an OS I wanted to use day to day.

With Windows 10, it's very different. I've been using the previews for a while on a test PC and I'm pretty convinced. It fixes everything I didn't like about Windows 8 and I like the slick, minimal interface. It's not perfect – I'll miss Windows Media Center – but I'll be upgrading my main PC as soon as I can.

Daniel Booth, Editor

I'm a Windows geek, so few things excite me more than the launch of a new version. But I have never upgraded for the sake of it. Maybe it's my conservative nature, but I've always waited a few months before taking the plunge. I disliked Windows 8 so much on a work PC that I never upgraded my home computer at all. It still runs Windows 7 (the best OS ever, in my view, with XP a close second).

Windows 10 won't be as bad as Windows 8, but I can't fight the suspicion that Microsoft has rushed its release. I'll install it straight away at work, but for now I'll stick with Windows 7 at home.

Sherwin Coelho, Technical Editor

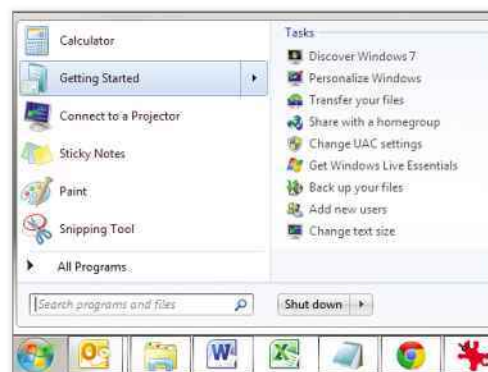
I've been testing the Windows 10 Technical Preview for a while now, and I think this is a stellar OS – which tends to be the case with alternate releases (XP and 7, for example).

I've got mixed feelings about the new Android-style system of incremental updates, though. If I've learned anything from Android and iOS, it's that incremental updates are plagued with bugs, at least at first. So I'm going to err on the side of caution and hang on to Windows 7 on my main PC while any bugs are ironed out in Windows 10. It's my birthday in November, so maybe the free upgrade will be my pressie to myself.

Jane Hoskyn, Features Editor

By day, I'm a Windows 7 user. By night, when I whip out my laptop, I am a Windows 8.1 bore. I don't particularly want to give all that up. My laptop works with my iPad, scanner, printer and Android phone; gives me control over updates and screen layout; and does it all *very* fast (Android Lollipop, by contrast, is so slow it helps me sleep).

I resent the need to wipe my Windows 7 PC, but I also don't want to miss out on Windows 10 – so I may grab a bargain Windows 8 desktop PC and install 10 on it. Or I may just use my colleagues' Windows 10 PCs while they're not looking. **ca**



Windows 7 is "the best OS ever" – but will Windows 10 beat it?

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50 most useful Command Prompt commands



In the first of a new series, Jane Hoskyn introduces your PC's oldest – and most powerful – hidden tool

The Windows Command Prompt ('command line') is your PC's last living link to **MS-DOS**. It's barely aged a day and remains one of Windows' most powerful tools, but it's sorely under-used. No surprise, really: it's stuffed with jargon and looks like something a nostalgic hacker would dream about.

Windows 10 will make the command line a little more user-friendly by letting you paste text into it. But whatever version of Windows you're using, this age-old tool makes life easier by giving you quick control of tasks that would otherwise involve lots of clicking around in the Control Panel – anything from shutting down your PC to copying multiple files from one directory to another.

Open it by typing **cmd** into Start and pressing Enter. Type a 'command' at the 'prompt' (the line of text that starts with 'C:' and ends with '>') and then press Enter to carry out your chosen task.

Over the next few issues we'll reveal some truly powerful and inventive commands, but first here are the 10 Command(ments) for finding your way around the Command Prompt.

1. See a list of commands

Type **help** at the prompt and press Enter to instantly generate a list of common commands, along with brief details. The list is in capital letters, but you can type

commands in lower case (or even a mix) – the command line isn't case-sensitive.

2. Copy results to the clipboard

Your next instinct may be to save this list of commands to your Desktop for easy reference. However, there's no File menu and no support for copy and paste (pre-Windows 10, at least), so you can't just press Ctrl+A then copy and paste everything to Notepad.

But here's a trick: type space, then **clip** after any command, and the results will be automatically copied to your clipboard. For example, type **help clip** and press Enter, then open Notepad and press Ctrl+V to paste the list of commands.

3. Find out what a command does

Type a command, then a space, then **/?** and press Enter to see a description. In some cases you need to type **??** instead of **/?**; try both.

4. Command your whole PC

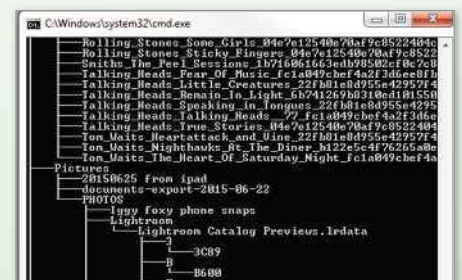
By default, the Command Prompt accesses 'C:\Users\your name'. To access your entire hard drive instead, type **cd** and press Enter to get a new prompt: 'C:\>'. Alternatively, specify a directory to work in. For example, type **cd\windows\system32** to move the prompt to the 'system32' folder, where hidden system files are kept, even in 64bit PCs.

5. See directory contents

Type **dir** and press Enter to see folders in the current directory. If you're at the 'Users' prompt, for example, you'll see a list including Desktop, Downloads and Searches, along with modification dates.

6. See all directory contents

Type **tree** to see a visual tree of every file in your selected directory. If your prompt is 'C:\>' and you've had your computer for years, you may need to go and make a cup of tea while the tree populates – but don't wander far, because it's fascinating to watch.



See a tree diagram of every file in a selected folder or directory – or across your entire PC

7. Get a new prompt

Type **cmd** or **command** to generate a new prompt at the same location as your previous prompt. So if you'd been at 'C:\>', the new prompt will also be 'C:\>'. To go back to default, close Command Prompt and start again.

8. Open a new window

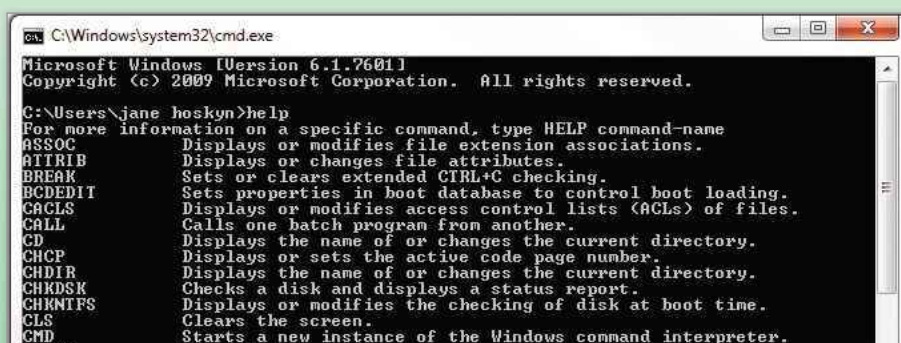
Type **start** to open a second Command Prompt window, showing the same prompt as in the first window.

9. See recent commands

Type **doskey /history** to see all the commands you've typed in the current session.

10. Clear the command window

Type **cls** to remove everything from the window except the prompt. **ca**



The 'help' command generates a list of common commands

Is your router being hacked?

Hackers don't just want to break into your PC – they're after your router, too. Jane Hoskyn explains how to keep your internet connection safe

You know your PC can be hacked, you know your phone can be hacked and there seem to be new stories every day about websites being hacked. But your router?

Routers are actually very easy for hackers to break into. This is partly because your antivirus isn't designed to protect your router, but mainly because we tend to be blasé about our router settings. When's the last time you changed your router's password or scanned it for malware? Exactly.

Here we'll show you how to check your router for invaders, then kick them out and keep them out.

Scan your router for hijackers

It only takes seconds to check if anyone or anything has hijacked your router, and you don't even need to download software. Just go to the free new online

tool from security company F-Secure, Router Checker (www.snipca.com/17269), and click 'Start now'.

Your results will appear in a couple of seconds, if that. If all is well, you'll see a big green message: 'No issues were found'. If all isn't well, you'll be guided through what to do next.

Router Checker isn't a malware scanner in the vein of Malwarebytes and similar tools; it doesn't look for malicious files. Instead, it looks for malicious activity such as **DNS** (domain name server) requests that don't end up where they're supposed to go. In other words, it checks that when you type a web address such as www.google.co.uk into your browser, your router connects you to the appropriate website (Google,

in this case) rather than to, say, a malware-riddled site created by a hacker who's busy logging your keystrokes.

Once you've run Router Checker, click the '+' symbol under the results to see your router's vital statistics, including your **IP address**, your **DNS server's IP address** (they're different) and your broadband provider. Copy these details to Notepad or print them for safekeeping.

Incidentally if you're ever out and

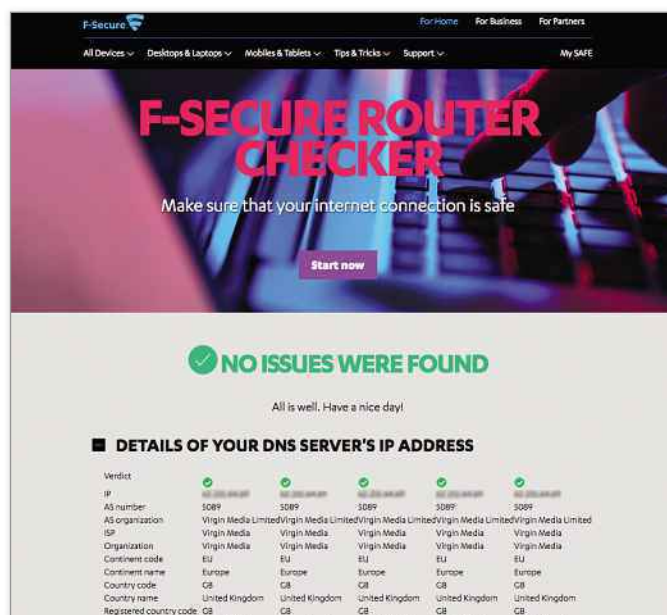
about with your laptop, tablet or phone and you want to connect to public Wi-Fi, run Router Checker first to quickly check the safety of the router you're using. Security on public Wi-Fi is often far more lax than in our homes.

Watch out for redirecting URLs

If you type a URL in your browser's address bar and it changes into an address you don't recognise or takes you to an unexpected site, it may indicate that your router is being hacked or the site's server has been hijacked.

Not all so-called 'redirects' are dodgy, of course. Web addresses often redirect for legitimate reasons, usually to save you having to type in a very long URL. Our shortened snipca.com URLs – which redirect automatically to longer web addresses – are just one example (try this, for example: www.snipca.com/17276). Similarly, if you type gmail.com into the address bar (or even just gmail, depending on your browser), the URL will automatically change into the full address for Gmail (<https://mail.google.com/mail/u/0/#inbox>), which we're rather glad we don't have to type in full every time.

But other redirects aren't so well-intentioned, so it's good practice to check your browser bar for unexpected URL behaviour. This is especially important when you're visiting a sensitive site such as your bank or webmail account, where the URL should always start 'https'. If it doesn't, you may



F-Secure's free online tool Router Checker lets you scan for hijackers on any router



Is your router being hacked?



Check suspicious URLs using online security tool VirusTotal

have been redirected to a fake ('phishing') version of the site by hackers, who could now merrily go about stealing your passwords and harvesting any personal details you type.

If you're worried about any URL, copy it to your clipboard and check it on free online tool VirusTotal (<https://www.virustotal.com>). Click VirusTotal's URL tab, paste the suspicious URL in the box and press Enter.

Dig out router worms

Router hackers commonly use worms to spread from router to router. They don't actually stuff routers with earthworms; in this context, worms are malware that replicate themselves and use security holes to spread from device to device.

The best-known example of a router worm is The Moon, which was found spreading among older Linksys routers last year. Its main effect was to drastically cut the routers' internet speeds, but it could ultimately have been used by its creators to remotely access and even control victims' internet activity.

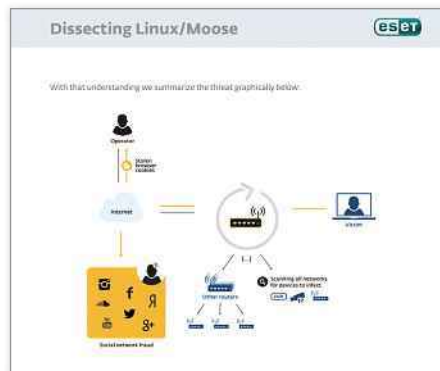
The Moon was soon brought down by a Linksys **firmware** update (www.snipca.com/17264) that patched the security holes the worm had been wriggling through.

Now there's an even more dangerous worm about. It's called Moose, and it's still on the loose. Moose (full name 'Linux/Moose') was first spotted in May, spreading through routers made by numerous companies including TP-Link, Belkin and Netgear as well as poor old Linksys. Once Moose has infected a router, it uses the hijacked internet connection to post spam and fake 'Likes' on social sites including Facebook. According to security firm ESET (www.snipca.com/17274; PDF), it could be used to eavesdrop on victims' internet activity.

As with last year's Moon attack, Moose can be removed by updating your router's firmware. Get into the habit of checking your router manufacturer's

website for firmware updates (see box bottom right); the site will also provide installation instructions. Always download firmware updates to a computer that's connected to your router using an **Ethernet** cable.

If your router won't accept the firmware file, it may be because it's infected by a more tenacious form of malware. It's a Catch-22: you update the firmware to get rid of malware, but malware won't let you update firmware. You could try downloading a third-party firmware file instead – the DD-WRT site has firmware for hundreds of routers (www.snipca.com/17288). If that doesn't work, you may need to buy in a new router.

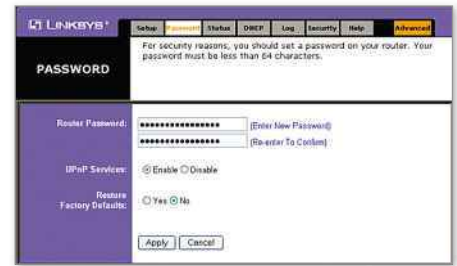


The Moose worm hijacks routers and uses them to post spam on Facebook

Lock out router hackers

Firmware updates don't just remove malware, they also help prevent it, by patching flaws that worms and other bugs exploit. There are many easier ways to lock hackers out, but we rarely do them. In fact, once we've got our Wi-Fi set up, most of us never think about our router settings again.

Connect to your router using an Ethernet cable and then log into your router's settings by typing your router's IP address (obtained from Router Checker, for example) in your browser's address bar.



Change your router password regularly to keep hackers out

Open your router manufacturer's website in a separate tab and check it for configuration instructions. Use the instructions to find your DNS server settings (usually listed under WAN, broadband or internet connection menus). The DNS server settings should be 'Automatically obtain DNS server settings from ISP'. If it's set to 'Use the following' (or similar) instead, and there's a string of numbers after it, type the string of numbers into Google to check they're associated with your ISP. If they're not, your router may be in the hands of a hacker. Change the setting to 'Automatically obtain...', save the setting and restart your router.

We also recommend switching off 'remote administration' or 'remote management access', which is often enabled by default. This setting can be useful but you're rarely likely to need it, and it can make your router vulnerable. So switch it off.

Finally, change your router's default password – and change it again every few months for good measure. Again, the exact process will differ according to router; you'll find instructions on the manufacturer's website (here are instructions for Linksys routers, for example: www.snipca.com/17287). In the next issue we'll show you how to create unforgettable, unhackable passwords for all your devices and accounts. **ca**

GET YOUR FIRMWARE UPDATE

Check which company made your router, then go to the relevant link below and follow the site's instructions. You'll need your router's model number; you can usually find it on a sticker on the back or bottom of the router.

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Problems Solved

PROBLEM OF THE FORTNIGHT

Where are my OneDrive files?

Q In a recent article about OneDrive you referred to 'OneDrive online' and also 'One Drive on your PC', which I didn't really understand. I have recently had problems with OneDrive and don't know what I'm doing wrong. I have a Windows 8.1 laptop with Office 2013 and a Vista desktop PC with Office 2007. There are two Excel files that I want to access from my desktop PC when I'm home and from my laptop when I'm away.

Most of the time I can achieve what I want, but occasionally I find one of the above machines offers me an older copy from somewhere and I can't seem able to get anywhere until I get back to the other machine. I've had similar problems when creating new photo folders on my laptop for backup, because these did not appear on the desktop PC at first. Help!

Philip Dickinson

A The idea of OneDrive is that you have the appearance of a single drive that contains the same stuff, no matter which machine you're using and no matter where you are. However, this concept is reliant on all computers having the ability to synchronise all the time (or at least very regularly), which is where we think your problem lies.

OneDrive's synchronisation process is this: an updated file is uploaded from the first computer to the online (cloud) version of OneDrive, and from there to your second computer. This also works in reverse. Basically, all your computers need an internet connection for OneDrive to work correctly.

If your laptop isn't connected to the internet while you're away from home



If you have problems syncing your OneDrive across devices, right-click its Taskbar icon

then it has no way to sync. So, if you change one of your Excel files on the laptop when you're out and about, but not connected to the internet, and then return home to fire up your Vista desktop, you won't see the updated file on your desktop PC. What you will instead see is an older version of the file, because OneDrive has no idea there's a newer version (because that new version has yet to be uploaded by the laptop).

You can fix this by allowing the laptop to sync when you get home, simply by switching it on and allowing it to connect to the internet, or by using a private 3G mobile or public Wi-Fi hotspot while out and about. How long it takes depends on the sizes of the files involved. An Excel file is unlikely to be more than a few megabytes, so shouldn't take more than a minute or two to update – even over 3G. But a folder filled with photos could take much longer.

And remember that you need the synchronisation to complete at both ends. Once the laptop has uploaded, the Vista desktop PC must also be online and ready to download the synchronised files that are now stored in the 'online' OneDrive. If the files still don't sync, right-click the OneDrive icon in the Taskbar and choose 'View sync problems'.

How do I stop these pop-ups?

Q Sometimes when I'm using my Windows 7 PC a pop-up appears in the middle of the screen. How do I stop this happening?

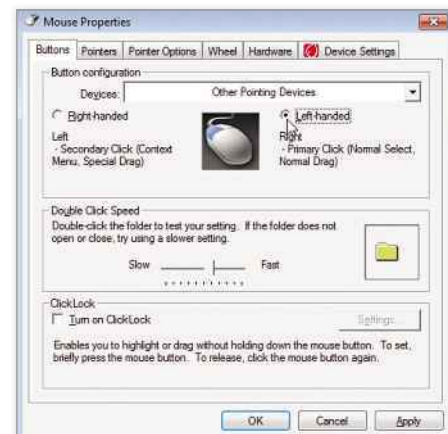
John Clarke

A You sent us a screenshot to illustrate your problem, which in fact shows a standard Windows context menu – or the list of varying options that pop-ups when you right-click with the mouse.

So, we think your problem is actually caused by your resting middle finger accidentally clicking the right mouse button. In this case, one solution would be to rest your middle digit elsewhere – but that might not be very comfortable on a larger mouse.

Another option would be to apply a Registry tweak to disable the right mouse button. However, this works only in Windows Explorer, so it wouldn't solve your problem when using other programs.

Our practical suggestion, then, is to reverse the actions of the two mouse buttons so that your index finger can use the right mouse button to 'left-click', leaving your middle finger to rest on the side of the mouse, or on the mouse mat. To do this, click Start, Control Panel, then 'Hardware and Sound' followed by Mouse. Select the Buttons tab, click the Left-handed button then click OK. If you ever need to right-click, you'll need to reach across to use the left mouse button.



Change your mouse button's functions via the Mouse Properties in your Control Panel

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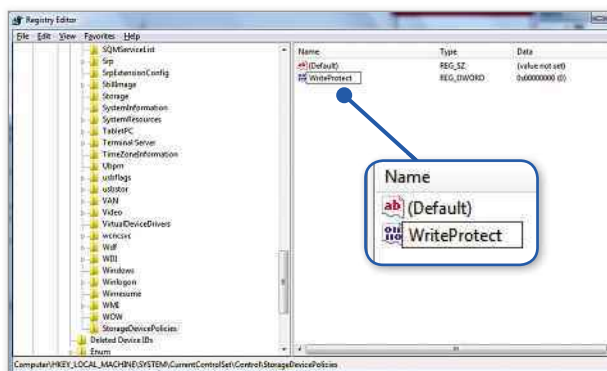
How do I remove write-protection from my USB stick?

Q I tried to format a USB memory stick but was told that "The disk is write-protected". I do not know how this happened. How do I remove this protection?
Joe Pester

A First, check whether your stick has a physical write-protect switch. Some do and they tend to be rather small – perhaps even recessed – in which case you'll need a pencil tip to flip it.

If it doesn't, then it's likely that Windows or a Windows application has at some point applied write-protection via the Windows Registry when you carried out some operation. If such an operation gets interrupted – for example, by Windows crashing – then you can end up with this situation.

The cure is a Registry tweak, so make sure you back up before beginning. Now click Start, type **regedit** into the search bar and press Enter. In the left-hand pane navigate to this key: **HKEY_LOCAL_**



Use this Registry tweak to reformat a USB stick that has become write-protected

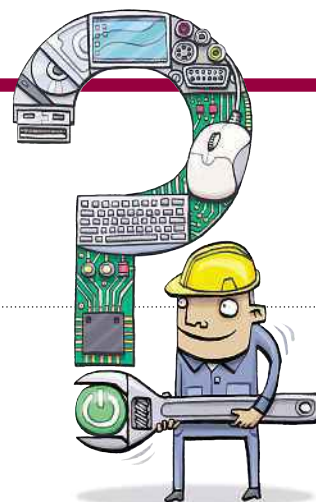
MACHINE\SYSTEM\CurrentControlSet\Control\StorageDevicePolicies. If the StorageDevicePolicies key doesn't exist then right-click Control in the left-hand pane, go to New followed by Key, then click and type **StorageDevicePolicies** and press Enter. Now in the right-hand pane look for WriteProtect. If it doesn't exist, right-click in the right-hand pane, point to New then click 'DWORD (32-bit) Value'. Name this 'WriteProtect'. Now double-click WriteProtect and set (or change) the value to '1'.

Now close the Registry Editor window, remove your USB stick, restart your PC and then reinsert the stick. If you still can't copy files to it then you'll need to format the drive in a certain way to remove the write-protection.

Click Start, type **cmd** then right-click cmd.exe and choose 'Run as administrator'. Now type **diskpart** and press Enter. Type **list disk** and press Enter to see all

attached drives, noting the number assigned to your USB stick.

Type **select disk X**, replacing 'X' with the disk number – for example, **select disk 1**. Now type **attributes disk clear readonly** and press Enter followed by 'clean' and Enter. Next type **create partition primary** and press Enter followed by either **format fs=fat32** or **format fs=ntfs** and hit Enter. The latter (NTFS) is probably what you want, unless you're using the stick on older devices that can only use the FAT32 file system (such as a smart TV, say).



Do I need to back up my brand new PC?

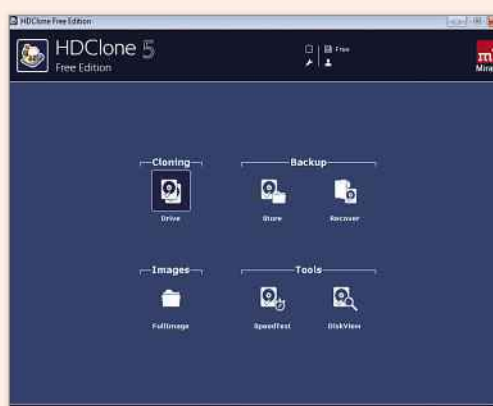
Q I am thinking of buying a new desktop PC that comes with a 1TB hard drive. If I did buy it, I would want to replace this with a 1TB hybrid drive. I was wondering if I still need to back anything up, even if the PC has never been switched on?

Edward Thwaite

A Why not shop around instead for a PC with a pre-installed **hybrid drive**?

There are plenty about, and any saving you might make by buying a PC with a traditional drive would be gobbled up by the cost of having to then buy a hybrid.

If you do press ahead with your plan, bear in mind that the outgoing hard



Copy your PC's entire system to a replacement hard or hybrid drive using HDClone 5

drive contains the Windows operating system and any pre-installed programs, while the new hybrid drive will be blank. So, while there's no need to

back up, you'll be starting with a blank PC.

Alternatively, use a free tool like HDClone 5 (www.snipca.com/16859) to copy the new PC's setup from the pre-fitted hard drive to your hybrid replacement. Fit both drives then use HDClone's Cloning option to replicate the hard drive on the hybrid. Then remove the hard drive and boot from the hybrid, or change the boot order in the **UEFI BIOS**. In Windows 8.1, open the Charms bar (Windows key+C), click Settings, 'Change PC settings', 'Update and recovery' and then Recovery. Now click 'Restart now' under 'Advanced startup', followed by Troubleshoot, 'Advanced options' and then UEFI Firmware Settings. Finally, click Restart.

Problems Solved

Why won't Windows 8.1's Photos tile remember my preference?

Q My Windows 8.1 computer has decided not to show a photo I selected for the Photos tile. I restore the function and it then displays until I log out, but when I log back in – no photo! What is going wrong?

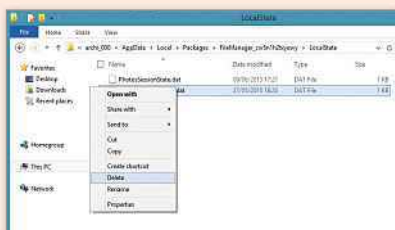
Jonathan Batt

A There is a bug in Windows 8/8.1 that can cause the Photos tile to display deleted photos, or no photos at all.

To fix it, you need to clear out the folder the app uses as a **cache**. First, launch Photos, then press Windows+key, click Options and set the 'Shuffle photos on the Photos tile' to Off. Now return to the Start screen, right-click the Photos tile and choose 'Turn live tile off'. Launch Photos again, then close it by clicking at the very top then dragging it down to the very bottom. Wait until the icon flips around then release the mouse button.

Next, launch File Explorer (Windows key+E) and navigate to **C:\Users\[YourUsername]\AppData\Local\Packages\FileManager_cw5n1h2txyewy\LocalState** and delete all files with a .jpg and .dat file extension. Also clear the Recycle Bin by right-clicking its icon and choosing Empty Recycle Bin.

Return to the Start screen, launch Photos, press Win+C, click Options and set the switch to On. Leave Photos running until a few photos have appeared, then restart your PC.



Restore your Photos tile functions by clearing the app's cache folder

Should I download, stream or tether?

Q Can you explain to me the difference between downloading and streaming? Is there a benefit to one or other method? Also, how does tethering fit in? You seem to mention all these terms regularly, but they're not in your Jargon Buster page.

Graham Titman

A Downloading means acquiring a file wholly before doing anything with it, whereas streaming means sipping a file's data as it's required. So, a downloaded movie or MP3 audio track will exist entirely on your PC, but streamed versions of the same content would live on a remote

server – with the data being sent to your computer in a 'stream' as you watch or listen.

With downloaded content there's no chance viewing or listening will be interrupted, but you'll first have to wait for the whole show or song to download. For films, this could be a long wait.

Streamed content can be enjoyed more or less immediately, but playback might be choppy on slow internet connections. This is why, for example, the BBC's iPlayer service has both download and streaming options.

Tethering is unrelated and is something you do to let other devices make use of a smartphone's 3G or 4G data (mobile-broadband) connection. For instance, you might tether an iPhone to your laptop, enabling the laptop to use the iPhone's data connection to get online away from home – assuming your phone contract allows tethering, and you're prepared to pay for the data.



You can download programmes from BBC iPlayer for interruption-free viewing if your internet connection is slow

Can I connect an old PC monitor to an Apple Mac?

Q I have an old monitor that I use with my PC. I have also picked up an old Apple Mac Mini computer. I'm wondering if I can attach my old PC monitor to my Mac Mini, or will I need to buy an Apple monitor?

Michael Frank

A We don't know how old your devices are, but regardless, the answer is almost certainly yes, because Apple sells various adapter cables that'll let you attach your PC monitor to your Mac Mini.

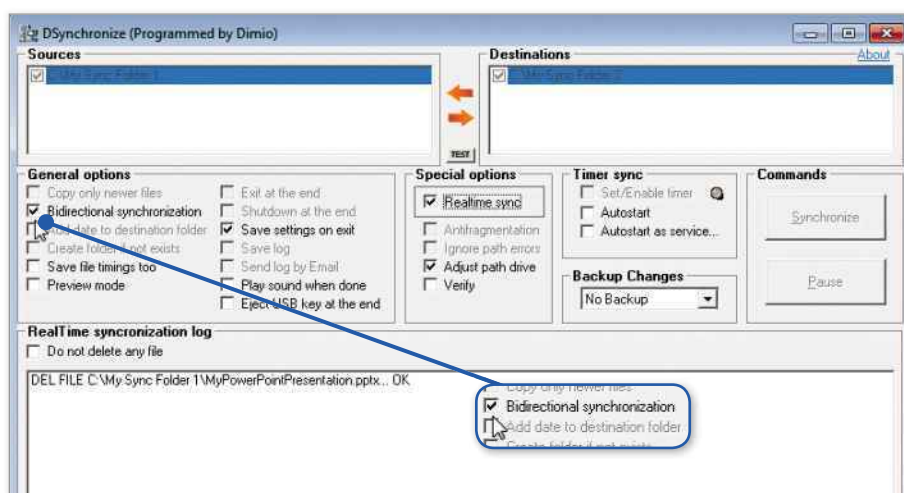
The one to buy depends on whether your display is an analogue or digital model. If it's a very old monitor (say, over a decade) then it'll likely have only an analogue connector known as **VGA** – a D-shaped plug with 15 pins. If so, you'll need to buy the £25 Mini DisplayPort-to-VGA Adapter (www.snipca.com/16815, see images below). Newer displays have a **DVI** connector (a squarer shape, with up to 24 pins), for which you'll need the same-priced **HDMI-to-DVI** Adapter (www.snipca.com/16816).



How do I sync without the cloud?

Q I have recently bought a new laptop and would like to synchronise selected folders between it and my desktop PC. I have a strong aversion to using the 'cloud' for this, nor do I want to have a **server** and router constantly running when I'm away. There used to be a way of doing this via USB. I believe Microsoft Briefcase was one option, but this has apparently been dropped by Microsoft. How can I achieve what I want?

Dennis Bill Use the free tool DSynchronize to sync files between PCs without using cloud services



A Many Windows tools will synchronise between local drives, and networked drives, but not so many do this in real time, which is obviously a key benefit of many cloud services. One tool that does is DSynchronize – a free download from www.snipca.com/16814.

DSynchronize doesn't need installing

so first right-click the downloaded file, choose Extract All and then double-click DSynchronize.exe to launch and configure it. Right-click in the Sources pane and choose Browse. Next, navigate to a folder you'd like to sync, then right-click in the Destinations window, choose Browse and select the corresponding folder on another drive or networked PC.

Tick 'Bidirectional synchronization', then click the Synchronize button and wait for the first sync to complete. Now tick 'Realtime sync' and you're all set up. To have DSynchronize launch with Windows – which isn't essential but sensible, unless you want to rely on your memory for synchronization – tick the Autostart box.

How do I rescue my drive after a failed partition?

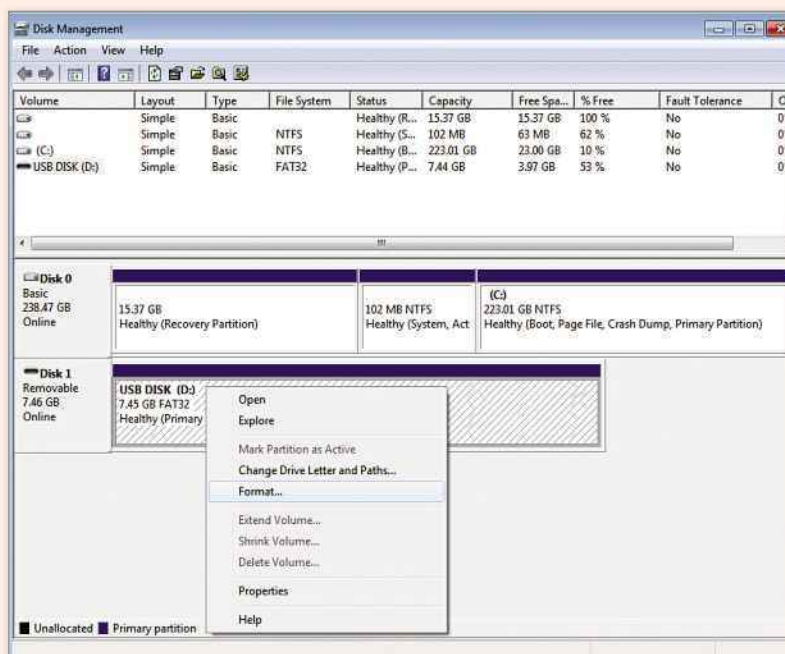
Q I have been using my old laptop as a **dual-boot** system with Windows 7 and Linux. I was in the process of rearranging **partitions** but this was interrupted (I can't remember what I did). Immediately afterwards, the PC would not boot, so I removed the drive and attached it as an external drive to my Windows 8.1 laptop. I can see it in Device Manager but it's not present in My Computer, so I can't access it. I have no important data on it. I just want to format it in order to make use of it. Any ideas?

Jim Turner

A Your drive should still be viewable in the Disk Management section of the Computer Management console. Have you tried that? If not, you can access this in Windows 8.1 by pressing Windows key+X then clicking Disk Management on the pop-up menu.

Now look for the drive in the bottom middle window: it will probably be called 'Disk 1', but check on the info listed alongside. We can't say for sure what will be listed to the right of the 'Disk 1' legend, but from here making the drive usable should be a simple matter of right-clicking and choosing the relevant option.

For example, format the partition by right-clicking it and choosing Format, or start afresh by choosing Delete



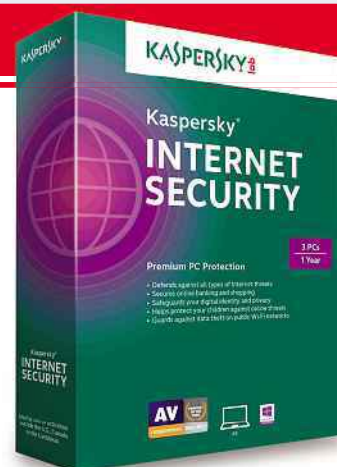
Format your drive by right-clicking it in the Disk Management section of My Computer

Volume followed by Yes to confirm. Then, right-click your partition-free drive again, choose New Simple Volume and follow the prompts to create a partition that you'll be able to see in My Computer (File Explorer in Windows 8.1).

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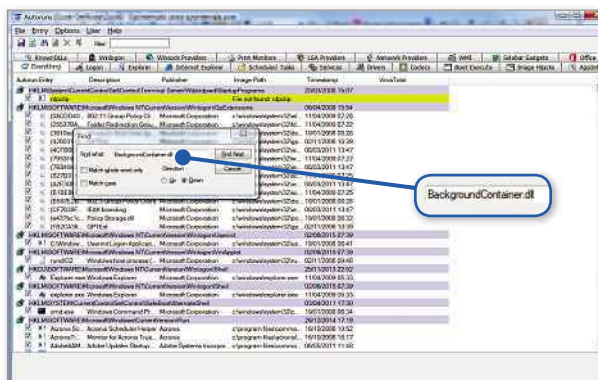
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How do I stop this annoying error message?

Q My computer starts up and lets me log on as normal, but when the Windows Desktop is shown there are two identical messages (one on top of the other), which read as follows: 'There was a problem starting C:\Users\Audrey\AppData\Local\Conduit\BackgroundContainer\BackgroundContainer.dll. The specified module could not be found'. I can clear both by clicking on OK and then clicking the red X at the top-right corner of the screen, but this happens every time I log on, so it's very annoying. Have you any idea what's causing this and how to stop it?

Audrey Turner

A This is the result of a previous malware infection that's been detected and removed by your security software, which is the good news. The bad news is that your security



Use free tool Autoruns to delete traces of malware left on your PC by your security software

software has left behind some non-harmful detritus, meaning that Windows is still attempting to launch the malware at startup. However, as the miscreant has been removed it fails, resulting in these error messages.

Effective cleanup will involve searching through the Windows Registry to find and delete the offending entries. As any accidents editing the Registry could lead

to more problems, you should back up before proceeding.

You can search and edit the Registry manually, but as you might need to eliminate multiple entries it'd be easier using a free tool like Microsoft's Autoruns, which is a free download from www.snipca.com/16801.

Launch Autoruns, open the Entry menu and choose Find. Type **BackgroundContainer.dll** into the 'Find what' box (see screenshot) then click the Find Next button. The first instance will be highlighted in the list in the main Autoruns window: right-click this entry, choose Delete from the pop-up menu, then click Yes. Now simply repeat these steps (starting with the Find part) until you've deleted all occurrences of BackgroundContainer.dll.

You should now be able to restart your PC without being annoyed by those messages.

Is my monitor ready for the skip?

Q I have a desktop PC running Windows 8.1, which I use with a ViewSonic VX924 LCD monitor. Recently, when turning on the PC and monitor, instead of it starting up very quickly, the display flashes on and off quite rapidly, while showing the word 'Digital' in the bottom right-hand corner of the screen. This can happen for as

many as 15 times before the word 'Digital' disappears. The monitor is useable while this happens so I can use my PC. I wonder whether the monitor is now on its last legs? I've been using this setup since 2006 without any bother.

Stan Dennis

A There are a few possibilities. First, have you checked that the monitor's cable connections at both ends are snugly inserted? The 'Digital' message indicates that the monitor has detected it is connected via a DVI port, so its rapid flashing suggests that the connection is loose.

If not, check the physical 'source' button on the display. We managed to find your display's manual online (www.snipca.com/17107), and the fourth button along the row of five is what switches between analogue and digital-input sources. It's possible that dirt is causing the problem, so give it a clean and press it firmly several times to ensure it's not stuck down.

Finally, venture inside your PC to check that the **graphics card** is firmly



Make sure your faulty monitor's 'source' button isn't stuck or clogged with dirt

inserted into its slot. While it might seem unlikely that the card would jump out of its socket, having a desktop or tower PC case pressed up against a wall over many years could cause it to work loose.

NEXT ISSUE

ON SALE
5 Aug

- Why won't Google find our website?
 - Are 6TB hard drives fakes?
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- ...And many more

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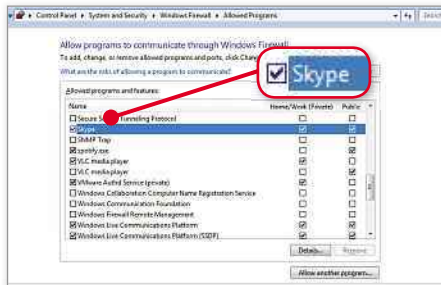
Skype

Fix jerky video, stop your calls breaking up and make Skype sign you out properly

Skype won't launch

If you can't get Skype to launch, first make sure you've got the latest version (from www.snipca.com/16969). If it still fails to launch, temporarily disable some security tools, such as your firewall (but be wary of disabling your main antivirus program).

To disable Windows Firewall, visit Control Panel's 'System and Security' section, click Windows Firewall and then 'Turn Windows Firewall on or off', select 'Turn off Windows Firewall (not recommended)' and click OK. If Skype now launches, re-enable your security software then look for any reasons for the blocking. In Windows Firewall, for example, click 'Allow a program or feature through Windows Firewall', then make sure that Skype is ticked.



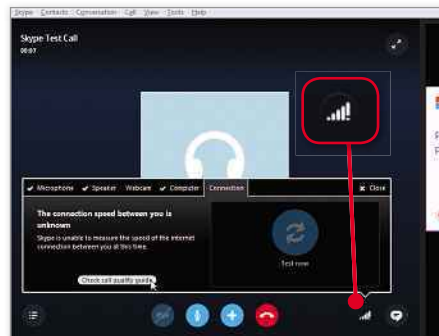
Windows Firewall could stop Skype from launching, so check your settings

Finally, a corrupted Skype file can sometimes prevent launch. Press Windows key+R to open the Run box, then type `%appdata%\skype` and press Enter. In the folder that opens, select and then delete the file 'shared.xml'. A new clean version of the file will be created automatically the next time you open Skype.

Calls keep breaking up

Skype uses different amounts of bandwidth depending on the type of call you're making – video call, group call and so on (www.snipca.com/17154). As a result, video and audio quality can change during your calls, to match fluctuations in your connection quality and that of the person you're calling.

You can check the current status by



When calls break up or video gets jerky, click the Call Quality Monitor icon for details

glancing at the Call Quality Monitor icon (a little row of bars, see screenshot above). If this icon is red or yellow, click it, and then click the Connection tab to see more information. To improve the connection, try moving your computer closer to your router (if you're using Wi-Fi), or use an Ethernet cable for the best possible broadband speed. Also, pause any background downloads and temporarily disconnect other devices from your router.

Video doesn't work

If Skype will let you make audio calls but not video calls, check that your webcam is properly attached and that Skype isn't having problems detecting it. Choose Tools from the Options menu, then click 'Video settings' under General. Now click 'Webcam settings' and choose your webcam from the Video Source dropdown menu. Click OK, then Save.

If you still don't get a picture, close all other programs that might be using the webcam, such as video-editing software or instant-messaging tools.

Also be aware that various Skype features, including video calling and screen-sharing, aren't supported by PCs bought before 2001 (www.snipca.com/17151). Unless Microsoft (Skype's owner) changes this – which is highly unlikely – you'll have to live with the limitations, buy a new PC or use the free Skype app on a smartphone or tablet (Android www.snipca.com/17152, iOS www.snipca.com/17153).

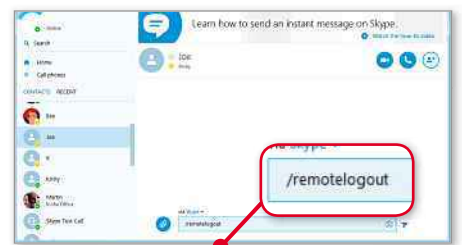
People can't hear you

If the person you're calling can't hear you properly, use Skype's Test Call facility to check what they are hearing and to test your equipment.

Click Test Call in the Contacts list, click the Call button and then follow the voice prompts to record and play a test message. If you do indeed sound too quiet or even silent, open the Tools menu, choose Options and then click 'Audio settings'. Check that your microphone is selected in the Microphone dropdown menu, then speak into it and check that the green bar moves as you speak. If there's not much movement, remove the tick from the 'Automatically adjust microphone settings' box, then move the Volume slider all the way to the right. Click Save and try another test call.

You've logged out but Skype says you're online

If you remain 'available' after logging out, it's probably because you've logged on at least once using the Skype mobile app. Skype sometimes maintains your available status after you've closed the app, depending on how you've set up the app's notification settings. You can fix this by disabling notifications or signing out of the app. Tap the three dots at the bottom right of the Skype app, then tap 'Sign out'.



If Skype shows you as available after signing out, type this command into a chat window

If you no longer use the mobile app, you can use the PC program to sign out instead. Start a chat with any contact, type `/remotelogout` into the chat window and press Enter. Now sign out of the program by choosing Sign Out from the Skype menu.

- Turn to page 42 for our Workshop on using Skype in your browser



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Jargon Buster

1080p Of the common types of high-definition video, this is the best quality: 1920x1080 pixels.

64bit A technology that processes information in larger chunks.

720p A common resolution of HD video: 1280x720 pixels.

ADSL2+ Provides subscribers with faster download speeds than traditional ADSL connections.

Beta A version of software that's being tested.

BIOS Basic Input-Output System. Essential software built into PCs that connects the vital components.

Cache A temporary space for storing information.

DirectX 9 An old version of DirectX.

DisplayPort A new socket for connecting monitors that's still relatively rare.

DNS Domain Name System. A technology that associates PCs with their addresses on the internet.

Driver A file that tells Windows how to work with a peripheral device.

Dual boot To set up a PC with two operating systems, so that one must be chosen each time it starts.

DVI Digital Visual Interface. A common type of display connector that can carry a digital signal.

Ethernet A standard used for almost all wired PC networks.

Firmware Basic software stored on a device, such as a music player, to control its operation.

Flash memory A type of memory that can retain information without a power source.

Graphics card A component in a computer that produces the image shown on the monitor.

HDMI High-definition media interface. A type of connection that transmits high-definition video and audio signals.

HTML Hypertext Markup Language. The language used to write most web pages.

Hybrid hard drive (HHD) A mass storage device that contains both a conventional hard drive and a flash memory module.

IP address Internet Protocol Address. A unique set of numbers, separated by full stops, used to identify computers and websites on the internet.

IPX7 An official industry rating classifying the level of protection in a product against outside intrusion. A rating of IPX7 means that a device can withstand incidental exposure to water of up to one metre for up to 30 minutes.

Mirror Third-party download site that hosts software installers.

Motherboard The main circuit board inside every PC into which all other parts connect.

MS-DOS Microsoft Disk Operating System. The standard PC operating system before the dawn of Windows.

NAS Network-attached storage. A hard drive attached to a network that can be shared by other PCs.

NFC (Near-field communication) A technology that allows two devices to communicate by being touched together or placed near to each other. Can be used to pay for items in some shops using compatible mobile phones.

Processor The processor – or central processing unit (CPU) – is the brain of a computer.

Plug-in A small program that adds extra features to your web browser or to other applications, and is loaded only when it's needed.

PUP Potentially Unwanted Program. A program that may not be desired, despite the user consenting to it being downloaded.

PVR Personal video recorder. Also known as DVR (digital video recorder). These set-top boxes let you pause and record digital TV.

RAM (Random access memory) The computer's working area, used for data storage while the PC is switched on.

Sandbox A virtual container that you can run programs in safely.

SATA 3 Also known as SATA 600. The latest and fastest version of the SATA interface for connecting internal storage devices to a PC.

Server A computer on a network, such as the internet, that distributes information to other PCs.

SSD Solid-state drive. Storage that – unlike a hard drive – uses no moving parts.

System Restore Point The collection of system files stored by System Restore on a given date and time to which Windows can revert if a problem occurs.

UEFI Unified Extensible Firmware Interface. A modern replacement for the BIOS, designed to get a PC into a state where it can launch an operating system.

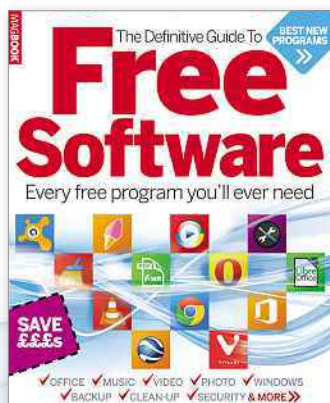
USB 2.0 Faster successor to USB that's used by devices such as external hard drives.

USB 3.0 A faster version of the USB standard used to connect devices to a computer.

VGA Video Graphics Array. A standard socket for connecting a monitor to a computer.

Wiki site A collaborative website that users can easily edit.

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IPX8 A device can withstand continual submersion in water.

Legacy status A computer system, program or technology that is out of date or in need of replacement.

M.2 A specification for internally mounted computer expansion cards and associated connectors.

Micro HDMI A miniature version of HDMI often found on smartphones and tablets.

MicroSD A small type of memory card. Can be converted to SD size using an adapter.

Open source Software that can be modified by anyone, rather than just by the employees of the company that created it.

Overclocking Making a processor work faster to improve performance at the cost of it getting hotter and requiring more power.

Partition A large hard drive can be split into two or more partitions. Once partitioned, each section is treated by Windows as though it were a separate hard drive.

PCI Express A faster version of PCI, used by modern graphics cards.

The Final Straw



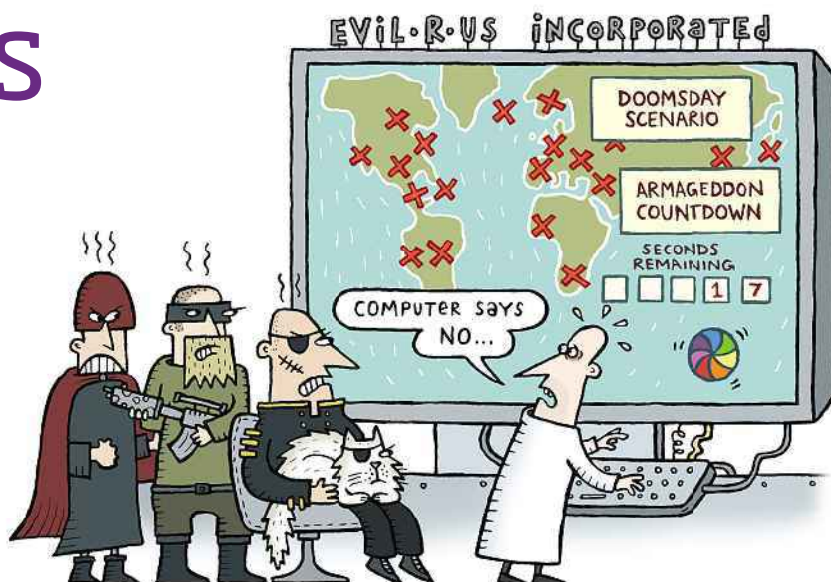
STUART ANDREWS is
Computeractive's Mr Angry

This issue Stuart Andrews is driven to despair by...

IT failures

There are some people who believe in what they call the singularity: the advent of an artificial intelligence so brilliant that it will transform life on Earth profoundly for the better. There are others who imagine a doomsday scenario, where some real-world cousin of the Matrix or *The Terminator*'s Skynet becomes self-aware and destroys humanity.

Me? I'm neither too hopeful nor too worried, because the more complex the computer systems we create, the more



“
Behind every IT
disaster are companies
who've been paid very
well to set things up
and keep them going
”

likely they are to fall flat on their face. A real-world singularity or Skynet would probably collapse over some minor, unforeseen fault – running out of **RAM**, for example, as it ponders some problem of little consequence.

Here's a case in point. My wife is currently waiting for a hospital appointment, and these are all managed by some vastly expensive IT system. I started calling on the Monday of last week to arrange the appointment, only to be informed that the computers were down, but may be up that afternoon. I called back, only to get a recorded message explaining that the systems weren't up after all, and that I should call at 10 the next morning for more news.

When I did so, it was pretty apparent that nothing was going to be resolved in my lifetime. In fact, I was asked to call twice a day for updates in a way that implied this fiasco might go on for weeks. Every day, twice a day, I called. Every day, twice a day, I got the same basic message. Sure enough by Friday I was told that the system wasn't up, was unlikely to be up any time soon, and that the team was moving to a fallback option. I'm not sure what that was, but nearly two weeks later we still don't have a date.

This system failure is no isolated case. In January, Sainsbury's bank left its card-holders embarrassed at the nation's tills because their cards couldn't be authorised. In December last year, the National Air Traffic Services systems went down, causing widespread disruption in many UK airports. In October, a breakdown of the Bank of England's electronic payment systems left thousands of homebuyers unable to complete their purchase, delaying over half of the day's transactions by hours and leaving around 30 per cent uncompleted. In April 2013, a systems failure at UK immigration led to confusion, massive queues and angry scuffles at airports. And who could forget the RBS's 2012 cock-up, which left 6.5 million customers unable to receive salaries, process mortgage payments or bank online?

These are complex systems and there will always be glitches, but that shouldn't stop our blood boiling. I get upset by the human misery caused by these failures: anxious people waiting to see a consultant, stressed-out homebuyers praying that their house purchase won't fall through, the poor forty-something bloke stuck at the till with a One Direction album and an 'I Love Harry' T-shirt (they were for my daughter, honest).

Behind every one of these IT disasters – plus those that don't even make it to fruition, like the disastrous NHS IT system that cost UK taxpayers £10 billion – there are companies who've been paid very well to set things up and keep them going. You can bet they didn't pause on their way to cash the cheques.

Most of all, I wonder why there never seems to be any backup system in place. We're all told to prepare for the worst, so why can't *they*? Amazingly, when the Bank of England's system went down in 2014, staff tried to fix it rather than move to the backup because the backup hadn't been tested. Which rather begs the question, why have a backup at all? This stuff drives me bonkers, but when the computer says no, someone messed up down the line – and ought to pay.

✉ Which IT failures drive you mad?
Let us know at letters@computeractive.co.uk

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- 3-year manufacturer's warranty

* Required: broadband Internet connection, router and active power sockets within one property.

amazon.co.uk

currys

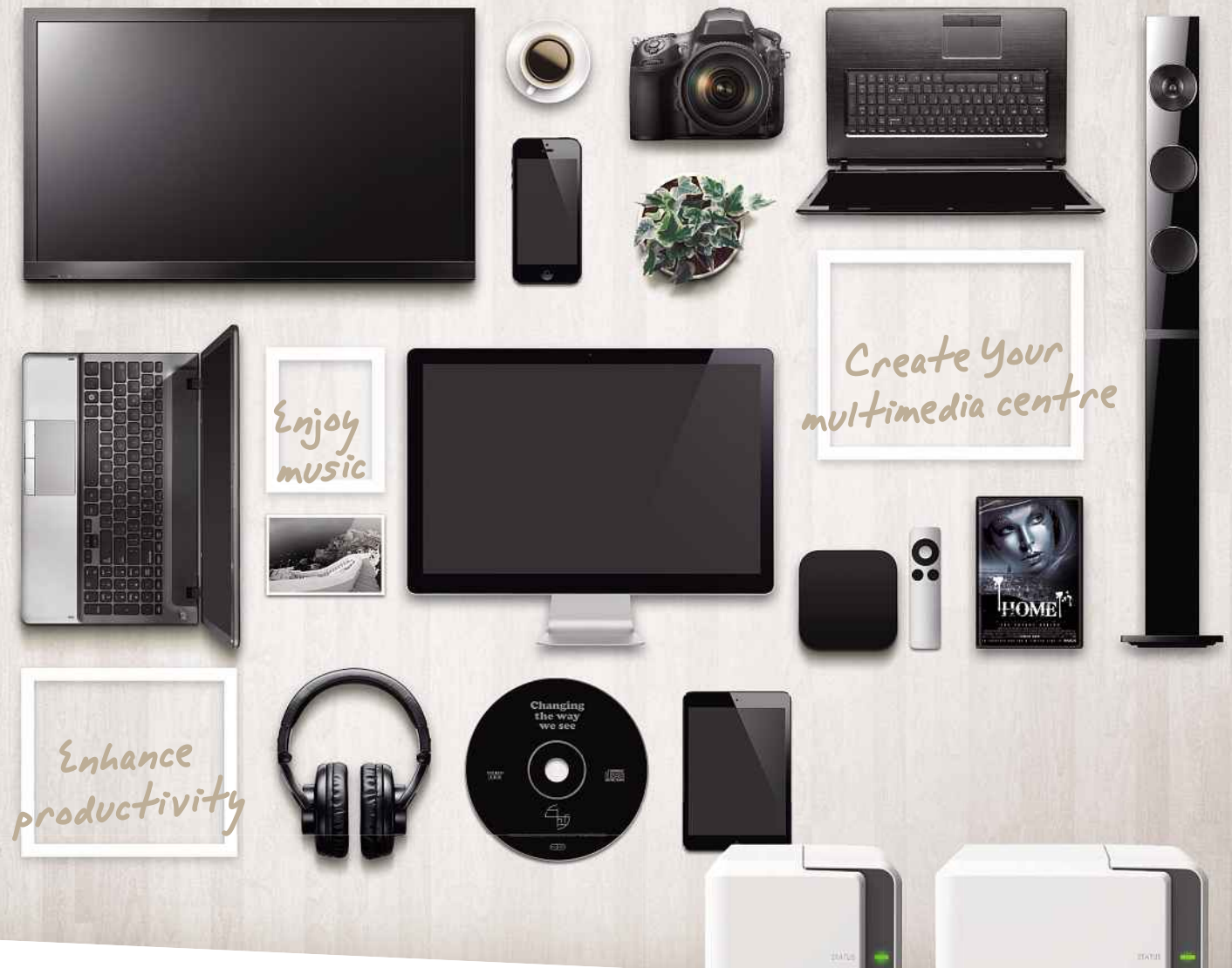
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DS115j AND DS215j

THE PERFECT DATA STORAGE SOLUTION FOR YOUR HOME

Run your own personal cloud from the comfort and security of your home



POWER-SAVING AND RELIABLE

DS215j features a dual-core CPU, supports up to 12TB of data and consumes less than 14w when active while the DS115j offers a stable storage environment for users with no need for raid, consuming less than 11w when active.

ACCESS ANYWHERE, ANYTIME

Synology NAS' and the intuitive DiskStation Manager (DSM) software allow users to sync and share files among multiple devices, including Windows PC, Mac, Linux, iOS, Android and Windows Phone.

MULTIMEDIA CENTRE

Audio Station, Photo Station, Video Station and Media Server transform your Synology NAS into a centralised multimedia hub.

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Synology apps available on

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